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THE INSECT PEST SURVEY BULLETIN

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THE MORE IMPORTANT RECORDS FOR AUGUST

Throughout the upper Great Plains egg laying by grasshoppers is well under way. Reports of damage in the New England and Middle Atlantic States, south to Pennsylvania, have been received from scattered localities.

The European earwig was reported late in July for the first time from Montana.

Decided increase in the population of the Japanese beetle was reported from parts of New England.

The Asiatic garden beetle was reported in large numbers in various localities from New York southward to the District of Columbia.

The weevil Calomycterus setarius Roelofs was reported as troublesome in houses in Connecticut and New York.

Blister beetles were generally abundant from New York southward to the South Atlantic States and westward to Mississippi. They were also unusually abundant and doing considerable damage in the East Central, North Central, and Plains States, and westward to the Pacific Northwest.

The fall armyworm was occurring in scattered outbreaks from New York to Florida and the Gulf States.

The hessian fly was reported on the increase from Ohio to Nebraska.

The wheat jointworm occasioned economic losses in Ohio for the first time in nearly 30 years.

The black grain stem sawfly was reported from the Middle Atlantic and eastern part of the East Central States.

Very late damage by the green bug was reported from Kansas.

Damage by the European corn borer was reported from Connecticut southward to eastern Virginia. This insect was found for the first time in North Carolina just across the State line from Virginia.

The corn leaf aphid was generally prevalent in the Middle Atlantic and East Central States, westward to Nebraska.

General spread of the vetch bruchid was reported from North Carolina and South Carolina. This insect also has been discovered 40 miles south and across the Cascade Mountains from localities where it was formerly known to occur in Oregon.

Second-brood codling moth was reported doing damage in parts of New York and New Jersey, southward to Delaware and Virginia, and in the Mississippi Valley. The insect seems to be above normal in Indiana. In Washington State the second-brood flight reached its peak during the middle of August.

The oriental fruit moth was reported generally from Delaware and Indiana southward to the Gulf States.

The grape trunk borer (Clytoleptus albofasciatus Lap.), which has caused severe damage in the Sandusky area of Ohio during the last 2 years, was again very abundant.

General injury to strawberries and severe injury to flax in parts of the Willamette Valley of Oregon by the strawberry fruit worm was reported during the month.

Unusual abundance of hornworms attacking tomatoes were reported from Vermont, New York, Kansas, and Utah.

Second-generation Mexican bean beetles were reported as generally destructive throughout the range of this beetle.

Damage by the bean leaf beetle was reported from the Gulf region.

Severe injury by the harlequin bug was generally reported from the Gulf region to Kansas and Kentucky. The insect was also reported from Nebraska and a few specimens were taken in Connecticut, the latter being the first recorded since 1910.

Heavy infestations of the onion thrips were reported from Connecticut and New York and the Black Hills section of South Dakota.

The boll weevil was generally prevalent and destructive in the South Atlantic States and Gulf region. In Oklahoma and Texas hot dry weather has generally held this insect in check.

Severe damage by the bollworm was reported from the South Atlantic and Mississippi Valley States, westward to Texas.

The cotton leaf worm has done very little damage this year in the Cotton Belt.

Considerable increase in the pink bollworm was observed in Cameron County and the southeastern part of Hidalgo County, Tex.

The cotton flea hopper was reported in damaging numbers from Oklahoma and Texas.

Cotton aphids were generally prevalent in the eastern part of the Cotton Belt, after treatment for boll weevil.

General infestation by the fall webworm was reported from the New England States southward to Florida, and from the East Central States southward to Mississippi.

Severe damage by the elm leaf beetle was reported from the eastern part of Massachusetts through Connecticut into southeastern New York. It was also prevalent in Pennsylvania, Virginia, and Ohio.

General damage by the locust leaf miner was reported from Massachusetts southward into Pennsylvania, Maryland, Virginia, and Mississippi.

Large areas of maples were being defoliated by the green-striped maple worm from Vermont and Massachusetts and across Michigan to Minnesota.

Rather heavy infestations of screwworms were reported from Georgia and Florida.

THE MORE IMPORTANT ENTOMOLOGICAL FEATURES IN CANADA FOR JULY AND AUGUST

The grasshopper outbreak in the Prairie Provinces was reduced materially by a widespread and well-organized poisoning campaign; however, the results of this work were offset to some extent in certain areas by grasshopper migrations. In Manitoba flights of immigrant grasshoppers resulted in increased infestations and damage in south-central and, to some extent, in west-central districts. Wheat and late oats and barley were seriously affected. Heavy losses occurred in an area 15-25 miles wide along the international boundary from Morden to Boissevain. Hot, dry weather in August was favourable for oviposition. In Saskatchewan there were flights of grasshoppers in many localities, but these were largely finished by August 10. Counts of dropping of heads of grain by grasshoppers indicate that losses for southeast Saskatchewan average 30 percent for oats and barley, with wheat averaging 18-percent loss south of Moose Mountain, and 8-percent loss north to the Qu'Appelle Valley. In Alberta grasshopper migrations were confined to the southeastern part of the Province, where extensive losses to late crops occurred.

Blister beetles are prevalent in the grasshopper-infested areas of the Prairie Provinces, causing damage to crops, weeds, and ornamental hedges.

The wheat stem sawfly infestation appeared to be materially greater than that of last year in Saskatchewan. Both in this Province and in southern Alberta, practically the entire plains area was infested and the species caused important damage to wheat. Severe-to-light infestations of the eastern wheat stem sawfly (Cephus pygmaeus L.) were found in many wheat-growing areas of Ontario.

Heavy infestations of Say's stink bug occurred in many localities in Alberta, from Calgary and the Red Deer River, south to the international boundary. From 10- to 50-percent damage was expected in many grain fields.

The European corn borer infestation in southern Ontario is reported to be not quite so heavy as in 1938.

A serious outbreak of the onion thrips developed throughout certain district in southwestern Ontario.

Flea beetles were injurious to field and garden crops in eastern Canada and the Prairie Provinces.

Slight extensions are recorded of the distribution of the European spruce sawfly in Pontiac County, Quebec, and around Lake Nipissing, Ontario.

An extension of the spruce budworm outbreak in the Algoma area, Ontario, and an increase in numbers of this species in eastern Ontario and western Quebec has been reported. The serious outbreak in jack pine, first reported in 1936, continues to be severe in northwestern Ontario and southeastern Manitoba.

A heavy infestation of the satin moth occurred at West Bathurst, New Brunswick, showing a considerable spread northward from the nearest previous record. Complete defoliation of poplars was observed in a number of localities in New Brunswick and Nova Scotia.

There has been a general subsidence of the forest tent caterpillar outbreak in eastern Canada, although infestations still persist in the Kipawa area, Province of Quebec, and in eastern Ontario.

Nearly all larch stands from Fernie and Kimberley, to the north end of Slocan Lake, British Columbia, and northward 80 miles from the United States border, are infested to some extent by the larch sawfly. In certain concentrated areas from 85 to 90 percent of the trees were completely stripped. Throughout central New Brunswick the infestations appear to be declining. Defoliation in Ontario and Quebec has not been so severe as in 1938.

The black carpenter ant is proving to be seriously destructive to telephone and electric power poles in the Winnipeg area, Manitoba.

Reports indicate that the codling moth is not a serious pest this season in well-sprayed orchards in the apple-growing districts of Nova Scotia, Ontario, and British Columbia.

The apple aphid and the rosy apple aphid were numerous and caused damage in the Annapolis Valley, Nova Scotia, especially in Annapolis County. The latter species was prevalent in orchards in the Okanagan and Kootenay districts, British Columbia. In the earlier part of the season the woolly apple aphid was more numerous in the Okanagan area than for many years, but by mid-August the infestations had been largely eliminated by the parsite Aphelinus mali Hald.

Tussock moth larvae caused damage in unsprayed or poorly sprayed orchards in parts of Nova Scotia, particularly in the western section of the Annapolis Valley.

GENERAL FEEDERS

GRASSHOPPERS (Acrididae)

Vermont. H. L. Bailey (August 25): Melanoplus sp. abundant in western counties, particularly Addison and Chittenden. In some sections second-crop grass and clover practically destroyed.

Massachusetts. A. I. Bourne (August 22): Grasshoppers were very abundant and causing serious damage to fields of clover and to gardens in Ashfield, Franklin County, on August 8.

Rhode Island. A. E. Stene (August 24): First complaint of extensive damage in a good many years. Apparently more than one species present.

New York. N. Y. State Coll. Agr. News Letter (August 21): Extensive feeding, in some instances on the edge of cabbage fields next to alfalfa or other hay crops in Ontario County, western New York. Many dead hoppers seen in a cabbage field in Schuyler County, where control was used.

Pennsylvania. L. E. Dills (August 15): Severe damage in Tioga County.

General. K. D. Quarterman (August 24): Control operations against Dissosteira longipennis Thos. discontinued in New Mexico and Texas but still under way in Colorado. Roadside baiting for concentrations of Melanoplus mexicanus Sauss. continued in a few counties in the flight areas of Montana and Wyoming. Second generation reported in first three instars in northern Texas Panhandle and Oklahoma Panhandle. Oviposition in progress in all areas. Oviposition by the differential grasshopper, beginning from South Dakota and Nebraska southward. Adults of M. bivittatus Say reported as dying rapidly, following oviposition in Iowa, Nebraska, and South Dakota. A little baiting going on in Idaho, Iowa, Michigan, Minnesota, and Wisconsin. About 50 percent of M. femur-rubrum Deg. in the northern Mississippi Valley area still in nymphal stages. Adult survey in progress in all areas.

Indiana. J. J. Davis (August 28): Not many reports of damage during the month. Report received from Fulton, north-central Indiana, indicating noticeable feeding on commercial celery plantings adjacent to uncultivated land.

Illinois. W. P. Flint (August 19): Populations continue low, with only a very small area where injury is occurring. Parasites and predators are holding down the hoppers.

Minnesota. H. Milliron (August 18): Reported as very abundant throughout the State, especially in the western counties.

North Dakota. F. G. Butcher (August 22): Populations generally markedly reduced, except in the eastern and northern parts of the State. Crop injury severe only in isolated localities in the northeastern and west-central parts of the State and in crop areas immediately adjoining the northwestern part of the Missouri River. M. mexicanus is the dominant species throughout the State, with M. differentialis, M. femur-rubrum, M. bivittatus, M. packardii Scudd., and Camnula pellucida Scudd. conspicuous in various areas. Egg laying apparently normal for all species.

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South Dakota. H. C. Severin (August 12): Damage is continuing, especially to corn, flax, and garden crops.

Nebraska. M. H. Swenk (August 15): Population greatly above normal over the entire State. Flights of migrating grasshoppers, largely M. mexicanus, occurred in western Nebraska, especially in the Panhandle area, but were not so conspicuous farther east as in recent years. In the more eastern part of central Nebraska, especially in the area from Howard to Polk Counties, north to Boone, and south to Clay and Fillmore Counties, there was much complaint of their concentrating in and defoliating not only fruit and deciduous shade trees, but also evergreens and shrubs. During the second half of July there were local reports of grasshoppers dying in large numbers as a result of attack by Sarcophaga kellyi Aldr. One report of unusually efficient control by this parasite received from Logan County on July 21.

Oklahoma. C. F. Stiles (July 31): Situation much improved over the entire State, and there has been very little crop damage. M. differentialis and M. bivittatus reported as damaging alfalfa in Kiowa and Harmon Counties. Some row crops being damaged by various species in the Panhandle counties. Small flights of D. longipennis and M. mexicanus reported from Texas County Control still under way in the Panhandle but other stations closed.

Utah. G. F. Knowlton (August 14): Control at its height in Cache, Weber, Salt Lake, and Utah Counties. Mating common, with M. mexicanus, M. bivittatus, M. packardii, and M. femur-rubrum usually the dominant species. Alfalfa and alfalfa seed most commonly injured now. Injury to tomato fruits occurring in Weber, Davis, Box Elder, Utah, and Salt Lake Counties. C. pellucida is injuring alfalfa and alfalfa seed crops at Benson, Cache County. Only in higher, cooler valleys are nymphs more numerous than adults. (August 18): Outbreaks of grasshoppers have occurred in New Harmony and Pine Valley, southern Utah. (August 25): Large numbers of C. pellucida are congregating on their breeding grounds near Ephraim and Wales, Sanpete County, central Utah.

Washington. V. Chapman (August 1): Losses held to a minimum in Okanogan County. Not found in several areas where they were last year, but located in some new communities. Apparently many of the hoppers in the Molson area were killed by extremely cold weather and unfavorable feeding conditions at hatching time. The later hoppers, largely M. mexicanus, have done very poorly, mostly being stunted and the numbers not sufficient to be economically serious. Peak of cycle about past.

California. G. H. Kaloostian (July 17): Damage by M. differentialis in a vineyard at Fowler, Fresno County, consisted of extreme defoliation, cane injury, and feeding on the bunches of early ripe grapes. (Det. by A. B. Gurney.)

MORMON CRICKET (Anabrus simplex Hald.)

Nebraska. M. H. Swenk (August 15): Reported as numerous about grain shocks in some fields as far east as Lincoln County the third week in July.

EUROPEAN EARWIG (Forficula auricularia L.)

Montana. H. B. Mills (July 30): Attacking flowers and gardens at Thompson Falls, Sanders County. Also reported from Lincoln County, but no specimens seen. Both counties in the northwestern part of Montana. First record of this pest in Montana.

Utah. G. F. Knowlton (August 12): Causing much annoyance in houses and entering fruits and ears of corn at Farmington, Davis County. Numerous complaints received.

Washington. E. J. Newcomer (August 18): More calls for information received than usual at Yakima. The fact that the last two winters have been mild has possibly caused a greater abundance.

WHITE GRUBS (Phyllophaga spp.)

Kentucky. M. L. Didlake (August 25): Counts, made in several bluegrass pastures during August, show that 1939 was a favorable year for the establishment of white grubs following the heavy beetle flight in the spring. Population range from 150,000 to 200,000 per acre, and some damage to sod is becoming noticeable.

GREEN JUNE BEETLE (Cotinis nitida L.)

Kentucky. M. L. Didlake (August 25): Peaches and grapes damaged during the first part of August.

Kansas. H. R. Bryson (July 29): Reports of this beetle as feeding on the leaves and fruit of peaches and other fruit trees received from Arkansas City and Topeka.

WIREWORMS (Elateridae)

Louisiana. O. T. Deen (July 3): Several larvae of Horistonotus sp. (possibly H. uhleri Horn) found attacking roots of cotton and corn severely at Ringgold, Bienville Parish.

Utah. G. F. Knowlton (August 21): At Hooper one field of tomatoes was reportedly one-fourth killed by wireworms.

California. M. W. Stone (August 23): Damage by the sugar-beet wireworm in a 50-acre field of lima beans near Somis, Ventura County, so severe that only half of stand remains. Beanfields in the Oxnard and Camarillo sections also damaged.

JAPANESE BEETLE (Popillia japonica Newm.)

Massachusetts. A. I. Bourne (August 22): More abundant than usual in much of the area of suburban Boston and in the vicinity of Springfield and West Springfield, in the Connecticut Valley. Very abundant on several of the large estates in the Berkshires, particularly in the section of Great Barrington and Egremont.

Rhode Island. A. E. Stene (August 24): Collections this year increased from 800,000 last year to over 3,000,000.

New York. M. D. Leonard (July 31): Beetles apparently reached their peak the latter part of the month at Flushing, but feeding seems to be about the same as reported earlier, owing undoubtedly to thorough and consistent control measures. (August 21): The number of beetles in traps at Flushing has steadily diminished during the last week or 10 days, and many reports indicate the beetle population as falling off in the quarantined areas.

R. E. Horsey (August 1): Reported in Brighton, near Rochester. They are uncommon and said to be the same as, or less than last year.

N. Y. State Coll. Agr. News Letter (August 21): In eastern New York sweet corn was seriously attacked for the first time in Westchester County, especially in the lower end of the county. Damage said to be worse than that of the corn ear worm. Not uncommon to find from 20 to 50 beetles per ear. Early peaches, plums, and apples also seriously damaged. Control measures necessitated.

New Jersey. M. D. Leonard (July 27): Examination of one small section of Ridgewood showed light feeding, by only a few beetles. Reported as much more numerous than last year near golf courses and other open places, and a moderate amount of grub injury to some lawns reported.

ASIATIC GARDEN BEETLE (Autoserica castanea Arrow)

New York. C. H. Hadley (July): Reported in destructive numbers on Long Island. Adults found feeding on cabbage, cauliflower, and turnip plants near Port Jefferson and Setauket. No apparent injury. Larval injury to seedling corn and beans found earlier in the year. Some feeding on ornamental garden plants by adults near Southampton.

New Jersey. C. H. Hadley (July): Present in moderate numbers in the vicinity of Riverton and Palmyra. Observed about street lights at night in considerable numbers. A light trap caught from 26 to 214 per night.

M. D. Leonard (July 27): Two or three dozen at light in a small, enclosed porch at Ridgewood.

District of Columbia. Isabelle Smith (August 29): Very destructive for several weeks in some gardens in the northwest section of Washington. Practically all flowering plants damaged. Shasta daisy first attacked, but chrysanthemum, bergamot, phlox, and rose foliage also favored foods. Such shrubs as forsythia, snowball, and Japanese rose attacked. On a warm evening early in July 200 beetles were collected in one garden. Other collections ranged from 30 to 100 beetles per evening. Feeding decreasing at present but still noticeable. (Det. by E. A. Chapin.)

ORIENTAL BEETLE (Anomala orientalis Wtrh.)

New York. C. H. Hadley (July): Various points on Long Island visited on July 13 and 14 to check on the status of this beetle. At points in Nassau County, where the beetle had been abundant in earlier years, it could not be found. No complaints received of turf injury. Never known to occur in destructive numbers in Suffolk County.

A WEEVIL (Calomycterus setarius Roelofs)

Connecticut. E. P. Felt (August 21): Found in large numbers in a house at New Canaan.

E. G. Hellyar (August 1): Annoying in a house in Norwichtown on July 28. (Det. by L. L. Buchanan.)

New York. C. A. Weigel (July 20): Reported as seriously injuring many flowers and garden plants, especially roses, at Wingdale, Dutchess County, in the Hudson River Valley. A serious nuisance in the house also. (Det. by L. L. Buchanan.)

BLISTER BEETLES (Meloidae)

New York. R. E. Horsey (July): Swarm of ash-gray blister beetle (Macrobasis unicolor Kby.) found on a planting of thermopsis on June 27 at Rochester. From four to five beetles on almost all the top leaves on the bed. Control measures successful. (Det. by H. S. Barber.)

North Carolina. C. S. Brimley (August): Epicauta marginata F. found attacking tomato and potato at Raleigh on August 8. Also found on tomato at Thomasville on July 31. Fig attacked at Durham on August 11.

South Carolina. J. G. Watts (August): E. marginata abundant and causing extensive defoliation of eggplant and E. vittata F. attacking foliage and fruits of tomato throughout the month at Blackville.

Alabama. J. M. Robinson (August 18): E. marginata reported on clematis vine at Yantley on August 17.

Tennessee. G. M. Bentley (August 10): E. pennsylvanica Deg. reported on turnip leaves at Chattanooga, Hamilton County.

Mississippi. C. Lyle (August 24): E. marginata found feeding on sunflower in Oktibbeha County on August 9. E. lemniscata F. very abundant on truck crops in southern Mississippi.

Ohio. E. W. Mendenhall (August 18): E. pennsylvanica causing considerable damage on gladiolus in Morrow County.

Michigan. R. Hutson (August 22): E. marginata reported as feeding on alfalfa and potato at Otsego.

Minnesota. H. Milliron (August 18): M. unicolor abundant at Roseau. E. lemniscata reported as moderately abundant at Lakefield and E. sericans Lec. at Canby.

Missouri. L. Haseman (August 25): More than the usual number of inquiries received in August, an aftermath of the last few years of grasshopper outbreaks.

North Dakota. F. G. Butcher (August 22): Extensive injury to potato and gardens throughout the entire western part of the State in recent weeks.

South Dakota. H. C. Severin (August 12): Damage all over the State. Excessive damage to sugar beets in the irrigated section in the vicinities of Belle Fourche and Newell.

Nebraska. M. H. Swenk (August 15): Large number of inquiries and complaints. E. lemniscata reported from Buffalo, Howard, Hall, Platte, Wayne, Dixon, Lancaster, Washington, and Sarpy Counties. E. cinerea Forst. a conspicuous pest during the latter half of July, especially in northeastern Nebraska, from Dixon and Platte to Douglas and Lancaster Counties. Unidentified blister beetles troublesome in Jefferson and Cass Counties.

Kansas. H. R. Bryson (August 7): Epicauta spp. about as numerous as usual. Reports of injury received from Columbus, Augusta, Mulvane, Glasco, Jewell, and Rawlins.

Oklahoma. F. A. Fenton (August 19): Found on tomato at Guthrie, Logan County.

Idaho. W. E. Shull (August 18): More numerous and causing more damage than usual on shrubs and gardens in all northern counties.

T. A. Brindley (August 1): Found feeding on flowers and shrubs in home gardens near Moscow.

Washington. E. C. Durdle (August 16): In Clark County large numbers of Lytta stygica Lec. have attacked hedges and shrubbery and caused severe damage.

L. G. Smith (August 16): Severe damage to garden flowers in the vicinity of Pullman.

FALL ARMYWORM (Laphygma frugiperda A. & S.)

New York. N. Y. State Coll. Agr. News Letter (August 14): Infestation on corn noticed recently in several counties in eastern New York. Now causing crown injury on young plants. (August 21): Infestation has commenced on Long Island.

Virginia. H. G. Walker and L. D. Anderson (August 25): Very destructive to many fields of late-planted corn in Norfolk and Princess Anne Counties and on the Eastern Shore. Reported as very destructive at White Stone, Lancaster County. Some fields totally destroyed.

Georgia. T. L. Bissell (August 11): More than the usual number of reports. Damage to corn reported as follows: On July 20 from Calhoun, northwestern Georgia; on July 21 from Experiment, central Georgia; on July 28 and August 11 from Spalding County, central Georgia; and, on July 26 from Henry County, central Georgia.

M. Murphey, Jr. (August 16): Collected feeding on corn. (Det. by C. Heinrich.)

E. E. Rogers (July 24): Completely ruined 20 acres of field corn at Valdosta. Every plant in the field showed considerable injury.

Florida. A. N. Tissot (August 24): Found in one field in Alachua County in a mixed infestation with the velvetbean caterpillar (Anticarsia gemmatilis Hbn.).

Alabama. J. M. Robinson (August 18): Reported as attacking sorghum at Auburn on August 16.

Mississippi. C. Lyle (August 24): Much injury to young corn during July and August. An unusually large acreage of late corn, owing to excessive rainfall during spring and early part of summer. Injury during August greater in the northern half of the State, although some complaints received from southern counties. Control measures used.

Louisiana. C. O. Eddy (August 23): Found feeding on corn, occurring in half-grown cornstalks at the rate of from 3 to 24 per stalk. (Det. by J. F. G. Clarke.)

Kentucky. M. L. Didlake (August 25): Found feeding on corn, although not in great numbers, at Bowling Green and California, Ky.

STALK BORER (Papaipema nebris nitela Guen.)

Massachusetts. A. I. Bourne (August 22): Infestation observed early in July in a nursery at Amherst. Larvae in considerable numbers were boring in the tender tips of seedling cherries, having evidently migrated from weedy growth along the borders of the planting, since all the damage was being done on the outside rows.

Oklahoma. F. A. Fenton (August 19): Found on chrysanthemums at Tulsa, Tulsa County.

BEET WEBWORM (Loxostege sticticalis L.)

Minnesota. H. Milliron (August 18): Abundant at Baudette.

SAY'S STINKBUG (Chlorochroa sayi Stal)

Utah. C. J. Sorenson (August 19): Becoming moderately abundant in alfalfa-seed districts of Millard County on August 4.

Arizona. W. A. Stevenson (August 5): A decided increase in populations during the last week in the Marana district. Five cottonfields have reached the damage point, and control measures necessary.

CEREAL AND FORAGE-CROP INSECTS

WHEAT AND OTHER SMALL GRAINS

HESSIAN FLY (Phytophaga destructor Say)

Ohio. J. S. Houser (July 31): The assembled data of the wheatfield survey show a sharp increase since 1938. Last year the average infestation of all fields examined was 10 percent, whereas this season it was 17.7 percent. Ashland County, in north-central Ohio, was the most heavily infested, with an average of 58 percent. Characteristic of the infestation this year was the unusually large number of fallen straws, accompanied by commercial damage.

Illinois. W. P. Flint (August 19): Annual survey covered most of the principal wheat-growing counties in the State. Infestation not heavy at any point. Rather light in the southern counties, especially in the south-central area. In the central and north-central areas the infestation is moderate but very general. Scarcely a field found in all this area which did not show a general, light infestation. Volunteer wheat abundant in all sections and showing a moderate infestation.

Nebraska. M. H. Swenk (August 15): Following extremely low population levels in southern Nebraska since the summer of 1934 and practically no important commercial damage since the winter wheat crop of 1932-33, hessian fly made a remarkable resurgence in the fall of 1938, which was continued moderately in the spring of 1939, so that now the population level in southeastern Nebraska appears to be approaching the danger point. Area concerned is in the Missouri River counties, from Burt County southward, and along the Kansas line from Richardson to Jefferson Counties, including the other counties in the angle thus formed. In the lowlands along the Missouri River there was commercial damage in numerous fields during the spring of 1939. Far removed from this eastern infestation, the continued increase in winter-wheat acreage and continued exceptionally early fall sowing have induced an infestation in Cheyenne County, southwestern Nebraska, which gives some concern as to the 1939-40 crop.

WHEAT JOINTWORM (Harmolita tritici Fitch)

Ohio. J. S. Houser (July 31): For the first time in nearly 30 years the wheat jointworm became a factor in some wheatfields. The highest infestations recorded were 29 and 31 percent in Licking and Knox Counties, respectively. Principal area of abundance in the north-central part of the State.

Illinois. W. P. Flint (August 19): Infestation very light.

BLACK GRAIN STEM SAWFLY (Trachelus tabidus F.)

Pennsylvania. E. J. Udine (July 31): A general wheat survey consisted of examination of 5 fields in each county and 50 wheat culms in each field. A 3-percent infestation found in Franklin County.

Delaware. E. J. Udine (July 20): A 4-percent infestation found in New Castle County, 3-percent in Kent County, and less than 1-percent in Sussex County.

Maryland. E. J. Udine (July 31): Infestation by counties as follows: Cecil, 1 percent; Queen Annes, 4 percent. In western Maryland infestation by counties ran as follows: Baltimore, 5 percent; Carroll, 20 percent; Montgomery, 5 percent; and Washington, 10 percent. Average for western Maryland, 8 percent.

Virginia. E. J. Udine and J. S. Pinckney (July): Infestation by counties as follows: Campbell, 1 percent; Essex, 2 percent; King George, 1 percent; Rockingham, 2 percent; and Westmoreland, 5 percent. Average for State, less than 1 percent--0.74.

Ohio. J. S. Houser (July 31): Intensity of infestation sharply declined, this being the third season of lessening damage since 1936, when two counties on the eastern border each averaged 68-percent infestation. The highest infestation was in Tuscarawas, 22 percent. Spread westward into new territory much less than for some years.

EUROPEAN WHEAT STEM SAWFLY (Cephus pygmaeus L.)

Pennsylvania. E. J. Udine (July 31): Survey consisted of examination of 5 wheat fields in each county and 50 wheat culms in each field. Infestation by counties as follows: Adams, 6 percent; Bucks, 4 percent; Cumberland, 2 percent; Lehigh, 4 percent; Union, 2 percent; York, 3 percent; and Centre, 16 percent. Average infestation for State, 2.6 percent.

Maryland. E. J. Udine (July 31): Survey showed less than 1-percent infestation, centered in Cecil County.

GREEN BUG (Toxoptera graminum Rond.)

Kansas. R. H. Painter (August 8): Wheat plants severely damaged by the green bug, although the insects appear smaller than usual. This sort of damage occurring widely in central Kansas, and a good deal of it suspected in western Kansas, where green bugs were abundant last month. This is the first time in our experience that this insect has done damage so late in the season. (Det. by P. W. Mason.)

CORN

CHINCH BUG (Blissus leucopterus Say)

Illinois. W. P. Flint (August 19): Rains late in July and in the first half of August have, in most instances, prevented damage. Moderate numbers still present in spotted areas all over the State, but little damage done.

Kansas. H. R. Bryson (August 5): The second brood is causing considerable injury to late corn and sorghums in the eastern third of the State. Adults of the first generation flew into corn and sorghum fields instead of migrating in the usual manner as nymphs. Reports of abundance received from Scranton an

Manhattan. (August 20): Second generation maturing and more abundant at Manhattan and neighboring localities than for 10 years. An abundance of crabgrass, foxtail, and other grasses supporting enormous numbers of bugs, which will go into hibernation. Presence of bugs of all stages indicates a partial third generation.

Oklahoma. R. G. Dahms (August 21): An extremely heavy infestation of third-generation nymphs in all sorghum fields in southwestern Oklahoma.

EUROPEAN CORN BORER (Pyrausta nubilalis Hbn.)

Connecticut. N. Turner (August 22): Nearly mature second-generation larvae present in maturing sweet corn ears. Infestation heavy but not in proportion to the enormous first generation. Many fields appear to be so heavily infested that the crop will be a total loss.

New York. N. Y. State Coll. Agr. News Letter (August 14): On Long Island the peak of second-generation moth abundance seems to be past, as well as the peak of second-generation egg laying. Abnormally dry weather is apparently hastening the end of activity. In Columbia and adjacent counties in eastern New York moth emergence is 80 to 90 percent complete in earliest plantings of corn and 30 to 50 percent complete in later plantings. Second-generation moth abundance apparently at its height, and new egg masses on late corn becoming increasingly numerous. Control begun last week. (August 21): Infestation on Long Island serious, many of the cobs containing pupae. Moths still abundant and new egg masses still being found in Columbia County, while injury from second-generation borers is beginning to show in the tassels of developing sweet corn. On Staten Island a reporter says that this is the first year in his observations of 7 years, that noticeable damage has been caused to corn. Infestation in some fields has averaged about 40 borers per 100 plants. Larvae are rapidly entering the plants in Ulster County. Eggs still found but much less plentiful. A few large larvae and one pupa found in field corn on August 18. Moths stil flying.

New Jersey. E. Kostal (August 5): Practically absent in the vicinity of Morganville, Monmouth County, after 2 years of heavy infestations.

Virginia. H. G. Walker and L. D. Anderson (August 25): A survey of Princess Anne County showed the insect to have spread along the sea coast from Pungo to the North Carolina line. All stages of the borer found in these fields. Infestation rather light, but found easily in all of the older plantings of corn examined. Infestation apparently very light or entirely absent in other parts of Princess Anne County.

North Carolina. H. G. Walker and L. D. Anderson (August 25): The European corn borer has been found on the mainland in the northeastern part of Currituck County and also on Knotts Island.

Indiana. J. J. Davis (August 28): A major pest in some of the eastern and northeastern counties. There is a conspicuous increase over last year, when commercial damage occurred for the first time since the borer was first found in the State over 10 years ago. A definite increase in 2-generation borers. As many as 900 moths collected in a single night from 10 light traps in a cornfield in Allen County.

CORN LEAF APHID (Aphis maidis Fitch)

New York. N. Y. State Coll. Agr. News Letter (August 14): Several bad infestations on corn in Livingston County, western New York.

Pennsylvania. T. L. Guyton (August 9): Serious damage done to the upper parts of corn plants in York County. In many cases completely covered.

L. E. Dills (August 15): Generally distributed over most of the State and unusually abundant on field and sweet corn.

Maryland. E. N. Cory (August 7): Very heavy, general infestation, accompanied by parasites and predators, particularly ladybird beetles.

Virginia. J. R. Lintner (August 21): Field-corn tops and tassels show a condition more prominent than ordinarily seen in the vicinity of Leesburg, even in fields where corn ears are practically made. (Det. by P. W. Mason.)

Indiana. J. J. Davis (August 28): Very abundant in many areas of the State and somewhat harmful to corn, especially hybrid corn.

E. V. Walter (August 21): The first aphids infested with Lysiphlebus testaceipes Cress. observed on August 8 and only a very few observed to August 19. All species of coccinellids very scarce, possibly owing to heavy parasitization of them, both last year and this, by Dinocampus coccinellae Schr.

Minnesota. H. Milliron (August 18): Abundant on corn at Doran.

Nebraska. M. H. Swenk (August 15): Reported as severely attacking corn in Wayne and Burt Counties on July 22 and 27, respectively. On August 5, 7, and 9 came reports of heavy infestations on sorghums in Buffalo, Redwillow, and Hamilton Counties.

CORN LANTERNFLY (Peregrinus maidis Ashm.)

Georgia. T. L. Bissell (August 22): Thick on leaf bases of young corn at Woolsey central Georgia.

Mississippi. C. Lyle (August 24): Some injury to corn reported in the northeastern section.

CORN ROOTWORM (Diabrotica longicornis Say)

Indiana. J. J. Davis (August 28): Damaged corn in southwestern Indiana by eating silks, preventing fertilization.

Tennessee. G. M. Bentley (July 25): Cotton plants damaged at Memphis, Shelby County.

Nebraska. M. H. Swenk (August 15): Damage to corn silks by adults reported on July 31 from Dodge County.

SEED-CORN BEETLE (Agonoderus lecontei Chaud.)

Minnesota. H. Milliron (August 18): Abundant throughout the State.

Kansas. H. R. Bryson (July 21): Reported as eating milo seed at Hugoton.

CORN FLEA BEETLE (Chaetocnema pulicaria Melsh.)

Indiana. E. V. Walter (August 21): Much more numerous than usual on dent and sweet corn.

A WEEVIL (Centrinaspis penicellus Hbst.)

Tennessee. G. M. Bentley (August 22): Larvae found in cornstalk at Decherd, south-central Tennessee. (Det. by W. H. Anderson.)

ALFALFA

ALFALFA WEEVIL (Hypera postica Gyll.)

California. A. E. Michelbacher (August 19): Survey made in the San Joaquin Valley on August 16. Larval count ranged from 0 to 71 per 100 sweeps of an insect net; adult count ranged from 0 to 5. Alfalfa fields at Pleasanton were surveyed on August 12 but no larvae or adults were collected. Fields adjacent to the San Francisco bay surveyed on the same date, the larval count ranging from 8 to 46 and the adult count from 0 to 4.

ALFALFA CATERPILLAR (Colias eurytheme Bdv.)

Kansas. H. R. Bryson (August 25): About as abundant as usual. More than the usual number reported at Halstead on irrigated alfalfa.

Utah. G. F. Knowlton (August 15): Extremely abundant over alfalfa fields at Petersboro, Mendon, and Wellsville, Cache County.

California. A. E. Michelbacher (August 19): In the San Joaquin Valley on July 24 several fields in the vicinity of Westley were being damaged by larvae. Injury very localized and most of the fields in the northwestern part of the valley had very small populations. On August 16 populations in most fields were extremely small.

GARDEN WEBWORM (Loxostege similalis Guen.)

Indiana. J. J. Davis (August 28): Reported on August 18 as abundant and destructive to alfalfa in La Grange County for the third successive season.

Kansas. H. R. Bryson (August 25): Reported as destructive to alfalfa, which has been allowed to stand for seed production, at Halstead. Larvae destroy the tops of the plants and thus prevent the blossoms from forming.

PEA APHID (Macrosiphum pisi Kltb.)

Utah. G. F. Knowlton (August 14): Unusually abundant in early and mid-August in some young alfalfa fields in Cache County.

C. J. Sorenson (August 19): Moderately abundant in many alfalfa fields in Millard County.

CLOVER SEED CHALCID (Bruchophagus gibbus Boh.)

Oklahoma. R. G. Dahms (August 21): Unusually abundant in the alfalfa seed-producing section of southwestern Oklahoma.

CLOVER

CLOVER HAY WORM (Hypsopygia costalis F.)

Missouri. L. Haseman (August 25): During the last 2 weeks in August there was a fairly heavy flight of moths, as shown by bait-jar catches at Columbia.

COWPEAS

COWPEA CURCULIO (Chalcodermus aeneus Boh.)

Georgia. T. L. Bissell (August 10): Cowpeas at Blairsville, northeastern Georgia, found with a small number of eggs and grubs.

VETCH

VETCH BRUCHID (Bruchus brachialis Fahraeus)

North Carolina and South Carolina. J. S. Pinckney (August 18): During May the distribution was further increased in North Carolina by the addition of Beaufort, Pender, and Wilson Counties, and in South Carolina by the addition of Abbeville, Anderson, Chester, Greenwood, Laurens, and Union Counties.

Oregon. L. P. Rockwood (June 30): Volunteer hairy vetch in full bloom swept in alsike clover fields near Sisters, in the northwestern corner of Deschutes County, and three specimens found in the two fields swept near Cloverdale schoolhouse. This location is apparently about 40 miles farther south tha the insect had been found in the Willamette Valley on the western side of the Cascade Range.

VELVETBEANS

VELVETBEAN CATERPILLAR (Anticarsia gemmatilis Hbn.)

Florida. A. N. Tissot (August 24): Very destructive during the last few weeks. Velvetbeans being injured, but the greatest concern is occasioned by damage to peanuts. Apparently most prevalent in the region extending from Gainesville north to Lake City.

F. S. Chamberlin (August 19): Abundant in Gadsden County.

Louisiana. C. O. Eddy (August 23): The soybean caterpillar occurs in large numbers in small areas in southern Louisiana, near the Mississippi River.

SUGARCANE

A FROGHOPPER (Monecphora bicincta Say)

General. J. W. Ingram (August 5): Found in small numbers, attacking sugarcane in all plantings examined in Louisiana, Mississippi, Alabama, Georgia, and Florida. Unusually abundant in the vicinity of Quincy, Fla.

WEST INDIAN SUGARCANE FULGORID (Saccharosydne saccharivora Westw.)

Georgia. J. W. Ingram and E. K. Bynum (August 2): Found for the first time in the southern Georgia sirup section. Not numerous enough to cause appreciable damage.

Florida. J. W. Ingram and E. K. Bynum (July 27): Scarce in southern Florida. It has at times caused heavy losses at Fellsmere.

YELLOW SUGARCANE APHID (Sipha flava Forbes)

Georgia. J. W. Ingram and E. K. Bynum (August 1): Unusually abundant in the vicinity of Cairo, but not abundant elsewhere in southern Georgia.

Florida. J. W. Ingram and E. K. Bynum (August 1): Not found in abundance in Florida, Alabama, or Louisiana.

SORGHUM

SORGHUM MIDGE (Contarinia sorghicola Coq.)

Georgia. T. L. Bissell (August 11): Sorghum heads blasted at Experiment, central Georgia. No insects present now.

F R U I T I N S E C T S

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

New York. N. Y. State Coll. Agr. News Letter (August 7): In Niagara County, western New York, sweet cherries were killed after suffering from drought and winter injury.

Maryland. E. N. Cory (August 15): Found in a cherry tree at Smithsburg.

Virginia. A. M. Woodside (August 25): Reported as very common in Augusta County.

Tennessee. G. M. Bentley (July 27): Damage caused to apple trees at Huntland, Franklin County.

Idaho. F. H. Shirck (August 21): Severe damage noted on peach trees at Parma by a shot-hole borer, possibly this species.

YELLOW-NECKED CATERPILLAR (Datana ministra Drury)

Ohio. G. A. Runner (August 17): Abundant at Sandusky on fruit and shade trees.

Indiana. J. J. Davis (August 28): Reported as partially defoliating apple at several places in the State.

RED-HUMPED CATERPILLAR (Schizura concinna A. & S.)

Washington. L. G. Smith (August 16): Noted on August 13 defoliating the branches of apple trees and rose bushes in home gardens at Pullman.

PLUM LEAFHOPPER (Macropsis trimaculata Fitch)

Tennessee. W. F. Turner (July 25): Taken on wild plum and peach at South Pittsburg, Marion County, on July 20. (Det. by P. W. Oman.)

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

New York. N. Y. State Coll. Agr. News Letter (July 31): In Niagara County quite abundant where not well controlled.

Delaware. E. P. Felt (August 21): Found in great abundance on plum at Wilmington

Maryland. E. N. Cory (August 9): Found on linden at Silver Spring.

Nebraska. M. H. Swenk (August 15): Report from Dawson County on August 8 that apple trees had been killed.

EUROPEAN RED MITE (Paratetranychus pilosus C. & F.)

Connecticut. P. Garman (August 24): Several bad outbreaks on apple in New Haven County.

New York. N. Y. State Coll. Agr. News Letter (July 31): Quite abundant on untreated prunes in Niagara County.

Michigan. R. Hutson (August 22): Scattered infestations over most of the State. Infestations observed at Mason, East Jordan, East Lansing, Dowagiac, Fenville, and Grand Rapids.

PACIFIC MITE (Paratetranychus pacificus McG.)

Washington. L. G. Smith (August 1): In the vicinity of the Prosser Experiment Station it is attacking raspberries and pears, the latter showing considerable damage.

APPLE

CODLING MOTH (Carpocapsa pomonella L.)

New York. D. W. Hamilton (August 21): In bait traps at Poughkeepsie peak capture of adults occurred from July 31 through August 2, but relatively heavy captures continued through August 11. Number of moths captured has decreased daily since August 12. Injury is now severe in orchards untreated during August, where first-brood injury was prevalent.

N. Y. State Coll. Agr. News Letter (August 7): In western New York little damage noted in Monroe County from second brood, but in Niagara County fresh larval injury began to show up in the middle of the week on apples and a little earlier on pears. Larval injury noted in the lake zone, wherever the first brood was not controlled.

New Jersey. E. Kostal (August 5): Second brood has caused heavy infestations at Morganville, Monmouth County, even in treated orchards.

Delaware. L. A. Stearns (August 23): Considerable adult activity during the last week in July and the first week in August, with the peak, as indicated by bait-trap catches, on August 1. Infestation generally greater than in 1938.

Virginia. A. M. Woodside (August 21): Infestation in Augusta County considerably heavier than last year. Flight of first-brood moths still fairly heavy in the orchards.

Tennessee. G. M. Bentley (August 21): Found on apples at Columbia, Maury County.

Indiana. L. F. Steiner (August 23): First-brood adults coming to traps in the Vincennes area in uniformly large numbers since the peak of activity in mid July. Second-brood adult activity increasing rapidly since August 19. Injury to fruit well above normal. (August 24): The 1,328 moths captured August 22-23 may be the peak for the second brood. It was the largest catch since July 15 and slightly exceeds the maximum catch of spring-brood moths. Most of the many fresh injuries now appearing in well-sprayed orchards believed to be third-brood. Mature larvae leaving apples in increasingly large numbers only since August 19.

Missouri. L. Haseman (August 25): During the month throughout the State in well-sprayed orchards the build-up of the August brood has been much lighter than in recent years.

Arkansas. D. Isely (August 23): Much less abundant in northwestern Arkansas than has been the average for the last few years.

Missouri and Kansas. H. Baker (July 27): First-brood moths were first noticed in the field on June 26, and by July 5 entrances by second-brood worms were readily found. Bait-trap catches have remained at a high level since July 6, the peak catches being taken on July 12 and 22. (August 28): Third brood expected to be unusually heavy in northeastern Kansas and northwestern Missouri. Bait-trap catches of second-brood moths high, and third-brood larvae easy to find.

Oklahoma. F. A. Fenton (August 19): Larva found on pear at Muskogee, Muskogee County.

Utah. C. J. Sorenson (August 19): Moderately abundant in all apple- and pear-growing sections.

Washington. E. R. Van Leeuwen (August 18): At Yakima moth emergence, egg deposition, and hatching and cocooning of larvae have been increasing since about July 18. A peak of moth captures in baits occurred from August 10 to 17.

TWIG PRUNER (Hypermallus villosus F.)

Missouri and Kansas. H. Baker (July 27): Damage by this insect, which was so conspicuous in orchards of northeastern Kansas and northwestern Missouri in 1938, first noticed this year on July 14. Only a few scattered, severe twigs observed.

APPLE APHID (Aphis pomi Deg.)

New York. N. Y. State Coll. Agr. News Letter (August 7): In western New York apparently on the decline in most orchards in Monroe County, and well parasitized and becoming fewer in Niagara County.

Indiana. L. F. Steiner (August 10): Increasing in abundance in orchards in the Vincennes area that were not well sprayed.

BUFFALO TREEHOPPER (Ceresa bubalus F.)

Washington. E. J. Newcomer (August 22): Apparently more abundant than usual at Yakima, at least in some apple orchards.

APPLE LEAFHOPPERS (Cicadellidae)

Connecticut. P. Garman (August 24): Occasional apple orchards showing heavy to moderate infestations by Typhlocyba pomaria McA.

Missouri and Kansas. H. Baker (August 28): Second brood somewhat heavier than normal in most orchards in northeastern Kansas and northwestern Missouri. Dominant species determined as Erythroneura dowelli Beam., E. omani Beam., and E. lawsoniana Baker. Of these three species, E. dowelli usually predominates.

APPLE MAGGOT (Rhagoletis pomonella Walsh)

Massachusetts. A. I. Bourne (August 22): A very definite late emergence took place in the eastern part of the State following the rains of the last days of July.

Connecticut. P. Garman (August 24): About the usual abundance but large numbers of flies reported by some growers during August.

New York. N. Y. State Coll. Agr. News Letter (August 7): In Rockland County, eastern New York, flies still very plentiful in many orchards.

New Jersey. E. Kostal (August 5): Locally abundant at Morganville, Monmouth County, in early and midseason varieties of apples. Infestation on high-bush blueberry at Morganville increasing rapidly since August 1. Damage moderate to severe.

Michigan. R. Hutson (August 22): Specimens sent on apple from Royal Oak.

PEACH

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Delaware. L. A. Stearns (August 23): Elberta crop shows but little injury.

Georgia. O. I. Snapp (August 16): Adult population in central Georgia peach orchards now heavier than that of an average year. Second-generation adults have just begun to emerge in commercial orchards. Of the first generation, 52.3 percent deposited eggs, 19 percent less than in 1938, and 18 percent less than in 1937, but about the same as in 1936. About half of the females of the first generation that emerged in 1939 did not deposit second-generation eggs during the season of their emergence.

Alabama. J. M. Robinson (August 18): Reported on peaches at Montgomery on August 5.

Mississippi. C. Lyle (August 24): Abundant on unsprayed peaches in the Meridian territory and in the southwestern section.

Tennessee. G. M. Bentley (August 9): Second brood causing damage to apples and late peaches at Arlington, Shelby County; 50-percent infestation.

Missouri. L. Haseman (August 25): Larvae quite abundant in August in central Missouri, although earlier in the season few larvae of the regular brood were found in stone fruits.

ORIENTAL FRUIT MOTH (Grapholitha molesta Busck)

Delaware. L. A. Stearns (August 23): Little injury to the Elberta crop.

Georgia. T. L. Bissell (August 21): Larvae killing young shoots of Photinia sp. at Experiment, central Georgia, but less numerous than last year. Heavy damage on young peach trees in Fayette County.

Florida. A. N. Tissot (August 24): On August 9 infested nectarine twigs were sent in. Infested peach twigs sent in from Tallahassee on August 10.

Mississippi. C. Lyle (August 24): Injured peach twigs received from Forrest, Jasper, Le Flore, and Pearl River Counties between July 31 and August 16. Reports of injury to peach received from the central section, the Meridian and southwestern districts, and Hancock County.

Ohio. E. W. Mendenhall (August 15): Quite bad on peach, quince, and apple in central and southern Ohio.

G. A. Runner (August 17): Twig injury early in August in the Sandusky and Lake Erie Island area was abundant in all peach orchards observed, the mid-summer infestation being apparently about normal, although variable.

Indiana. L. F. Steiner (August 3): More moths appearing in traps this week than at any time this season in the Vincennes area. In 4 orchards and 310 traps from July 26 to August 3, inclusive, 331 were caught.

Missouri. L. Haseman (August 25): Reported from practically all parts of the State where peaches are grown commercially, but in southeastern Missouri, where most of the peaches are grown, the Elberta crop matured without serious damage. Parasitization studies in that area most encouraging.

PEACH BORER (Conopia exitiosa Say)

Georgia. O. I. Snapp (August 16): General normal infestation at Fort Valley, central Georgia. Heavy in those orchards not treated last year. Emergence has increased during the last week, and a number of moths observed ovipositing in peach orchards.

Missouri. L. Haseman (August 25): Many inquiries as to control.

GREEN STINKBUG (Acrosternum hilare Say)

Virginia. A. M. Woodside (August 22): Severe damage to peaches in parts of Amherst County. More than 60 individuals collected from one 4-year-old tree. Ninety percent of the fruit in parts of the orchards damaged by feeding. About 70 percent had reached the adult stage.

W. J. Schoene (August 21): Numerous reports received regarding injury to lima beans. Apparently general, especially throughout the central part of the State, from Bedford east. One instance of severe injury to peach fruits in a large commercial orchard reported.

CHERRY

UGLY-NEST CATERPILLAR (Cacoecia cerasivorana Fitch)

Pennsylvania. L. E. Dills (July 25): Cherry tortrix abundant in Mifflin County.

CHERRY FRUITFLY (Rhagoletis cingulata Loew)

Oregon. S. C. Jones (August): Damage in Lane County not so severe as in 1937 or 1938. Infestation about normal in other Willamette Valley counties.

PUTNAM'S SCALE (Aspidiotus ancylus Putn.)

Ohio. T. H. Parks (August 4): Infested cherry twigs sent from Cleveland. (Det. by H. Morrison.)

PEAR

A PEAR-BLIGHT BEETLE (Anisandrus pyri Peck)

Massachusetts. A. I. Bourne (August 22): Damaging a commercial planting in Fall River, in lower Bristol County on July 18.

PLUM

PLUM GOUGER (Anthonomus scutellaris Lec.)

Oklahoma. F. A. Fenton (August 19): On plum trees at Paden, Okfuskee County.

A MITE (Eupalopsis mali Ewing)

Washington. E. J. Newcomer (August 18): A mite, tentatively determined by E. A. McGregor as this species, reported recently. Investigations show it to be distributed generally throughout the Yakima Valley on Italian prune. When numerous it appears to cause some longitudinal rolling of the foliage. In the Yakima Valley it has been found on apple, pear, cherry, and apricot adjoining prune orchards, but appears to be on these fruits only as a straggler

GRAPE

A BORER (Clytoleptus albofasciatus Lap.)

Ohio. G. A. Runner (August 17): This cerambycid, which has caused severe damage in a large vineyard in the Sandusky area during the last 2 years, again very abundant. The larvae are in the main trunks of older grapevines which show decayed spots. Agreeing with previous seasonal-history records, the period of heaviest emergence of the adults came late in June and early in July. Serious infestation apparently confined to one locality.

GRAPE BERRY MOTH (Polychrosis viteana Clem.)

Ohio. G. A. Runner (August 17): Egg deposition in the Sandusky area during the first week in August heavy in many vineyards. Young larvae of late brood beginning to enter the grape berries. The percentage of eggs parasitized by Trichogramma sp. at Vermilion is apparently low during the heaviest egg deposition of the second, or main, brood. Of 191 eggs examined on August 15 only 3 contained parasites that had reached the pupal stage.

GRAPE LEAF FOLDER (Desmia funeralis Hbn.)

Georgia. T. L. Bissell (August 24): Vines damaged at Griffin and Gray, central Georgia.

RAISIN MOTH (Ephestia figulilella Greg.)

California. G. H. Kaloostian (August 11): Taken on several varieties of grapes on the vines from Sanger, Fresno County, to Lindsay, Tulare County. Only larvae were present.

GRAPE SAWFLY (Erythraspides pygmaea Say)

Massachusetts. A. I. Bourne (August 22): A severe attack noted the first week in August in Hampshire County. Abundant enough to strip the foliage from a good many plantings.

GRAPE LEAFHOPPERS (Erythroneura spp.)

New York. N. Y. State Coll. Agr. News Letter (August 7): In Columbia County, eastern New York, nymphs of E. comes Say found on many of the leaves, some running as high as 50 per leaf. Most of them in early stages. Quite large numbers of adults in this vineyard.

Ohio. G. A. Runner (August 17): Many untreated vineyards in the Sandusky area show midsummer foliage damage, by various species of grape leafhopper, serious enough to interfere with normal ripening and coloring of the grapes.

A GRAPE FILBERT GALL (Schizomyia coryloides Walsh)

Michigan. R. Hutson (August 22): Submitted from Birmingham.

PECAN

PECAN WEEVIL (Curculio caryae Horn)

Georgia. T. L. Bissell (August 4): In central Georgia on July 28 a few weevils were found on pecan trees adjacent to woods at Yatesville and Thomaston. Weevil punctures found in a few dropped nuts at Milner on August 1 and on August 3 one weevil found at Woodbury. Present in small numbers and emerging slowly. (August 9): Abundant in pecans at Woodbury, central Georgia. (August 22): Numerous and causing pecan nuts to drop at Zebulon and Locust Grove, central Georgia.

PECAN NUT CASEBEARER (Acrobasis caryae Grote)

Georgia. T. L. Bissell (August 3): Infested nuts brought in from Woodbury and insect reported as injurious for several years in one orchard. Nuts are small and were infested in May. This pest not noted in central Georgia before this year. (August 9): Considerable damage to several varieties of pecan at Woodbury. Some worms found in larger nuts.

BLACK PECAN APHID (Melanocallis caryaefoliae Davis)

Georgia. T. L. Bissell (August 9): Abundant and injurious on pecan as usual at Woodbury. Few aphids present now. (August 22): Considerable damage on pecans at Zebulon and Locust Grove.

WALNUT

WALNUT CATERPILLAR (Datana integerrima G. & R.)

New York. R. E. Horsey (August 10): A recently hatched brood found on black walnut at Rochester.

New Jersey. C. L. Griswold (August 19): Abundant in various localities of Morris County. Many trees completely defoliated.

Pennsylvania. L. E. Dills (August 23): Observed late in July, and in some sections many trees defoliated.

PINEAPPLE

A MITE (Stigmaeus floridanus Banks)

Florida. H. Spencer (August 22): Unusually abundant, slips from infested fields, used for planting, having carried heavy infestations to new beds.

TRUCK-CROP INSECTS

CUCUMBER BEETLES (Diabrotica spp.)

Connecticut. N. Turner (August 22): Late plantings of summer squash heavily infested by D. vittata F. early in August. Many plants killed.

Virginia. W. J. Schoene (August 21): Injury by corn rootworm (D. duodecimpunctat F.) to peanuts at Holland, and damage to about 20 percent observed in one field. This is an unusual peanut pest in that it causes serious injury at rate intervals.

Mississippi. C. Lyle (August 24): D. vittata reported as seriously affecting the market value of watermelons in the northeastern section by feeding on the outer skin. Specimens received from Hinds County, where watermelons and cantaloups had been injured. Banded cucumber beetle (D. balteata Lec.) received from Jones County on August 18 with information that serious injury had been caused to dahlia flowers. Specimens received from Hinds

County where watermelons and cantaloups had been injured.

Louisiana. C. O. Eddy (August 23): D. balteata has been very destructive on soybeans throughout Louisiana.

Kansas. H. R. Bryson (August 25): Southern corn rootworm more abundant this year than for the last 3 years.

Utah. G. F. Knowlton and A. B. Call (August 16): The pale variety of the 12-spotted cucumber beetle (D. duodecimpunctata tenella Lec.) has damaged cucumbers and other small vegetables in Washington County localities.

Oregon. G. R. Ferguson (August): Adults of the western 12-spotted beetle (D. soror Lec.) have caused considerable damage to several crops during the last month in the Willamette Valley. Damage to corn, particularly sweet corn, rather severe in some localities. Damage to beans has continued to be serious. Alfalfa and clover fields are supporting large populations of the adults and suffering considerable injury. Severe injury to several gardens reported.

FLEA BEETLES (Phyllotreta spp.)

New York. N. Y. State Coll. Agr. News Letter (July 31): Flea beetles reported as eating 20 outer rows of cabbage in a field in Orleans County, western New York. Most of them were P. aerea Allard. The other species is P. zimmermani Crotch. (Det. by H. S. Barber.)

Tennessee. G. M. Bentley (August 7): Heavy infestation of striped flea beetle (P. vittata F.) on cowpeas at Oakland and Selmer, Fayette and McNairy Counties.

STRAWBERRY FRUITWORM (Cnephasia longana Haw.)

Oregon. G. R. Ferguson (August): Results from a survey of fiber flax, grown in the Willamette Valley in 1939, based on samples from 50 fields, showed that 8.5 percent of the flax was injured by larvae of the omnivorous leaf tier. Injury to strawberries appeared to be general and in some fields ranged from 25 to 50 percent of injured or wormy berries. Injury to vetch, peas, nursery stock, and other crops apparently more widespread and severe than in previous years.

POTATO APHID (Macrosiphum solanifolii Ashm.)

Indiana. J. J. Davis (August 28): Abundant on tomatoes in central Indiana.

Utah. G. F. Knowlton (August 14): Wild geranium plants heavily infested in Logan Canyon during the latter part of July and early in August.

California. J. C. Elmore (April 20): Attacking summer squash in the Palos Verdes-San Pedro hills, Los Angeles County. Numerous, necessitating treatment. (Det. by P. W. Mason.)

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STATE PLANT BOARD

SOUTHERN GREEN STINKBUG (Nezara viridula L.)

Mississippi. C. Lyle (August 24): Reported as numerous on cowpeas in the southeastern section and on lima beans in Pike County. Specimens received from Hinds and Holmes Counties the last week in July.

FALSE CHINCH BUG (Nysius ericae Schill.)

South Dakota. H. C. Severin (August 12): Much damage to bush fruits, strawberries, and garden truck in the Black Hills area.

Texas. R. K. Fletcher (August 12): Reported from Dallas County as severely injuring the seed pods of flax.

POTATO AND TOMATO

COLORADO POTATO BEETLE (Leptinotarsa decemlineata Say)

Nebraska. E. J. McNerney (August 7): In a car of potatoes out of Kearney on August 1 were found hundreds of live beetles, crawling on the bags when the car was broken.

Washington. E. J. Newcomer (August 18): Abundant in home gardens at Yakima.

POTATO FLEA BEETLE (Epitrix cucumeris Harr.)

Pennsylvania. L. E. Dills (August 23): Abundant late in July and early in August in the central and northeastern counties.

Ohio. N. F. Howard (August): During the week beginning August 14, flea beetles, chiefly E. cucumeris, became extremely numerous on eggplant at South Point and on potatoes at Columbus.

Minnesota. H. Milliron (August 18): Moderately abundant at Madison Lake.

North Dakota. J. A. Munro (August 22): Very abundant in potato fields at Fargo and northwards to Grand Forks. Observations made at Grafton, Park River, and Cavalier indicated very light infestations.

HORNWORMS (Protoparce spp.)

Vermont. H. L. Bailey (August 25): Hornworms, P. quinquemaculata Haw. and P. sexta Johan., appearing in unusual abundance, particularly in Washington and Chittenden Counties. P. quinquemaculata greatly predominates among specimens observed.

New York. N. Y. State Coll. Agr. News Letter (August 7): Tomato hornworms abundant. Reported from four counties during the last week as infesting tomatoes and, in one instance in Onondaga County, western New York, as infesting tobacco. (August 21): In western New York tomato worms are very abundant and destructive in Erie, Wayne, and Niagara Counties. Control measures necessitated.

Kansas. H. R. Bryson (August 20): Reports from Jewell, Manhattan, and Hutchinson indicate the tomato worms as destructive.

Utah. H. E. Dorst (August 3): Approximately 25 acres of tomatoes near Warm Springs, northern Utah, almost completely defoliated. Only occasional feeding observed in other tomato areas of the State.

G. F. Knowlton (August 5): Tomato foliage damaged at Logan, Providence, and Lewiston.

TOMATO PINWORM (Keiferia lycopersicella Busck)

Pennsylvania. C. A. Thomas (August 24): No specimens found during careful examination of tomato plants in Pennsylvania greenhouses and gardens during last spring and summer.

POTATO LEAFHOPPER (Empoasca fabae Harr.)

Connecticut. N. Turner (August 22): Infestation on potatoes continues to be very heavy in most localities.

New York. N. Y. State Coll. Agr. News Letter (August 7): On Long Island leafhoppers numerous lately, and foliage injured by their migration from field to field. (August 14): In western New York heavy populations and noticeable injury found in Genesee County, while in Jefferson and Franklin Counties they are very scarce.

Minnesota. H. Milliron and assistants (August 18): Very abundant generally.

North Dakota. J. A. Munro (August 22): About 20 nymphs per potato plant at Fargo and about 2 per plant at Park River, according to counts made during the last week.

POTATO AND TOMATO PSYLLID (Paratrioza cockerelli Sulc)

North Dakota. J. A. Munro (August 22): Present in moderate numbers throughout a large part of the State. Observations on July 23, 24, 29, and 30 revealed adults as present on potatoes in gardens and small fields in or near Beach, Taylor, New Salem, Bismarck, Medina, Jamestown, and Valley City. Observations on August 10-12 revealed them as present in the vicinities of Mandan, Baldwin, Wilton, Washburn, Cole Harbor, Minot, Granville, Towner, Knox, Leeds, Devils Lake, Lakota, and Arvilla. Unverified reports indicate them as present again this season in the northwestern area in which they occurred last season. Observations indicate that they are mainly distributed west of the main potato-growing area of the Red River Valley.

South Dakota. H. C. Severin (August 12): Some damage to potatoes and tomatoes in the Black Hills and surrounding area.

Nebraska. M. H. Swenk (August 15): Not proving very troublesome this season, greatly in contrast with 1938. From Dawes County on August 1 came the only complaint received this year.

A MEALYBUG (Pseudococcus solani Ckll.)

Nebraska. M. H. Swenk (August 15): Found attacking the roots of potato plants in Hall County on August 10.

NORTHERN MOLE CRICKET (Gryllotalpa hexadactyla Perty)

Nebraska. M. H. Swenk (August 15): Specimens taken from a potato patch in Holt County received on August 14. Specimens sent in from Platte and Sheridan Counties on July 31 and August 14, respectively.

BEANS

MEXICAN BEAN BEETLE (Epilachna varivestis Muls.)

Connecticut. N. Turner (August 22): First-generation adults have caused serious damage to garden beans.

New York. N. Y. State Coll. Agr. News Letter (August 7): In the pupal or first-generation adult stages in up-State New York. More widespread than a year ago, but first-generation larval injury not as severe. Numerous beetles have developed in the last 3 weeks. (August 14): In western New York observed in Livingston, Ontario, and Genesee Counties. It was found for the first time in Jefferson County on August 9. (August 21): Second-generation eggs seen in small numbers in Seneca County on August 18 and in Tompkins County on August 20, the latter in a field of beans that were all but destroyed by first-generation grubs. This 4-acre field now covered with beetles. On Long Island the second generation has been slow to develop. Egg laying continuing and the first eggs have hatched. Pentatomids preying on the larvae. In Ulster County second-generation larvae beginning to cause damage. In western New York second brood hatching in Allegany and Genesee Counties, but in Ontario County very few beetles generally and no eggs found.

Virginia. H. G. Walker and L. D. Anderson (August 25): A great deal of damage in some beanfields and in a great many home gardens at Norfolk.

South Carolina. J. G. Watts (August): Noticeably less abundant than usual late this summer at Blackville.

Georgia. T. L. Bissell (August 11): Much damage at Griffin, central Georgia, in the last 2 weeks to old, neglected beans. Cowpeas show light damage. A few pupae noted, denoting a generation reared.

O. I. Snapp (August 16): Infestation at Fort Valley, central Georgia, moderate and about that of an average year.

D. F. Farlinger (August 19): Severe injury on snap and lima beans in field and garden in Appling and several adjacent counties. Beetle rapidly spreading over the coastal-plain section of Georgia.

E. E. Rogers (August 21): Local gardeners at Valdosta complaining of exceptional injury on late beans.

Florida. F. S. Chamberlin (August 19): Continuing very abundant in Gadsden County.

Mississippi. C. Lyle (August 24): Heavy damage to late beans and cowpeas in the northeastern section, the Meridian district, and in Yalobusha County. Specimens received from Chickasaw, Clarke, Lauderdale, Oktibbeha, and Newton Counties between July 25 and August 18. A report from Webster County stated that all beans in the town of Eupora had been destroyed.

Ohio. N. F. Howard (August 22): Second generation numerous and injurious at South Point. Untreated beans defoliated.

E. W. Mendenhall (August 15): Destructive in central Ohio. Some bean patches totally destroyed.

Indiana. J. J. Davis (August 28): Abundant and destructive in many parts if not in all of Indiana.

Michigan. R. Hutson (August 22): Observed in many counties in the southern half of the Lower Peninsula, as far north as Midland County.

Utah. G. F. Knowlton (August 15): Considerable damage to garden beans and less to field beans in Carbon County, as compared with injury last year.

BEAN LEAF BEETLE (Cerotoma trifurcata Forst.)

Pennsylvania. L. E. Dills (August 23): Damage occasionally done in the central part of the State early in August.

Georgia. T. L. Bissell (August 7): Larvae on cowpea roots at Experiment, central Georgia, mining the main root and killing plants.

Mississippi. C. Lyle (August 24): Said to be causing considerable damage to late beans in the southeastern section.

Louisiana. C. O. Eddy (August 23): Very destructive on soybeans throughout Louisiana.

Arkansas. D. Isely (August 23): Extensive injury to soybeans reported from Pulaski County, central Arkansas.

PEAS

Correction

Washington. L. G. Smith (August 17): Under pea weevil (Bruchus pisorum L.) in the Insect Pest Survey Bulletin, dated August 1, 1939, (v. 19, No. 6, p. 386), in the second sentence of the report from Washington it should read "Willapa Valley, Pacific County," rather than "Pierce County."

CABBAGE

CABBAGE SEED WEEVIL (Ceutorhynchus assimilis Payk.)

Washington. E. P. Breakey (August 1): Specimens of cabbage seed pods which had been attacked were received from Wahkiakum County. Pods contained well-developed larvae, although damage was apparently light.

L. G. Smith (August 16): After visiting a number of cabbage seed fields in Skagit County, infestation was estimated to be approximately 25 percent. Only a small number of seeds in each pod damaged. Nearly all of the larvae have matured and emerged from the pods. Little evidence of parasitization.

IMPORTED CABBAGE WORM (Pieris rapae L.)

Connecticut. N. Turner (August 22): Universally present but little damage caused.

New York. N. Y. State Coll. Agr. News Letter (August 28): Less injury to cabbage in western New York than at any time in the last 4 or 5 years.

CABBAGE LOOPER (Autographa brassicae Riley)

New York. N. Y. State Coll. Agr. News Letter (August 21): A fresh emergence of cabbage loopers on Long Island during the last week. On Staten Island two fields of cabbage were almost completely destroyed before control measures were started.

HARLEQUIN BUG (Murgantia histrionica Hahn)

Connecticut. R. L. Beard (August 24): Two specimens taken at Mount Carmel, this being the only record in Connecticut since 1910.

Maryland. E. N. Cory (August 9): Found on cabbage at Cumberland.

Florida. A. N. Tissot (August 24): Mustard, turnips, and other greens being severely injured at Tampa on August 2.

Mississippi. C. Lyle (August 24): Specimens received from Hinds County on July 31 and from Washington County on August 19. Reported as rather abundant over the southern third of the State and in the northeastern section. Collards, cabbage, and related crops infested.

Kentucky. M. L. Didlake (August 25): Abundant at Moreland.

Nebraska. M. H. Swenk (August 15): Found in Kearney County on August 14, when they were in about the fourth or fifth instar.

Kansas. H. R. Bryson (August 25): Reported as destructive in southeastern Kansas and at Hutchinson on turnips and cabbage. More noticed at Manhattan than ordinarily seen, but not abundant enough to cause damage.

Texas. R. K. Fletcher (August 12): Severe injury to turnip in Anderson County.

APHIDS (Aphiidae)

New York. H. Glasgow (August 18): Cabbage aphids (Brevicoryne brassicae L.) more abundant and destructive in western New York cabbage-growing districts than for years.

N. Y. State Coll. Agr. News Letter (August 28): Cabbage aphids very prevalent in many plantings and marked injury caused in many cases. Peak apparently reached at present, and it is not increasing at the rate of about a week ago.

Pennsylvania. L. E. Dills (August 22): Cabbage aphids abundant in dry areas of the State late in July and early in August.

SQUASH

SQUASH BORER (Melittia satyriniformis Hbn.)

Connecticut. N. Turner (August 22): Locally very abundant. Many fields of early summer squash heavily infested and vines killed.

New York. N. Y. State Coll. Agr. News Letter (August 7): In Monroe County, western New York, considerably more abundant than usual and causing considerable loss in a number of plantings. (August 21): On Long Island observed not to be as destructive as usual.

Michigan. R. Hutson (August 22): Infestations observed at Lake, Allen, and Port Huron.

South Carolina. J. G. Watts (July 24): One larva found on cantaloup at Blackville

SQUASH BUG (Anasa tristis Deg.)

New York. N. Y. State Coll. Agr. News Letter (August 7): Some infestations found in Steuben and Monroe Counties, western New York. (August 14): Eggs found occasionally on squash on Long Island, and nymphs not very numerous. (August 21): Late brood found in fair numbers in Orleans County.

Louisiana. C. O. Eddy (August 23): Extremely abundant on squash.

Michigan. R. Hutson (August 22): Numerous at Lansing, Lake Orion, Pontiac, Owosso, and Grand Rapids.

Minnesota. H. Milliron (August 18): Abundant on pumpkin at West Concord.

Nebraska. M. H. Swenk (August 15): Reported as attacking cucurbits in Lincoln, Custer, Lancaster, Douglas, and Sarpy Counties during the period July 20 to August 5.

Kansas. H. R. Bryson (August 25): Unusually abundant and doing considerable damage to squash and pumpkins in the truck district.

Utah. G. F. Knowlton (August): Injury throughout the month in Cache, Davis, and Weber Counties, northern Utah, in Carbon County, east-central Utah, and in Washington County, southern Utah.

Washington. L. G. Smith (August 1): Observed in the Pasco area as causing some damage on nearly mature squash. Eggs and first- and second-instar nymphs the most abundant stages.

MELONS

SQUASH BEETLE (Epilachna borealis F.)

Virginia. H. G. Walker and L. D. Anderson (August 25): Rather abundant in a number of watermelon fields near Smithfield late in July and early in August.

MELONWORMS (Diaphania spp.)

South Carolina. J. G. Watts (August): The first record of the season at Blackville for the melonworm (D. hyalinata L.) was on July 25. Larvae very abundant on late cantaloups and cucumbers, to which they are causing extensive defoliation. Practically 100 percent of cantaloups and cucumbers infested with pickleworm (D. nitidalis Stoll).

Mississippi. C. Lyle (August 24): D. nitidalis reported from Warren County on Ju 20 in squash. Unusually numerous in the southern district and at State College.

Kentucky. M. L. Didlake (August 25): Gourds attacked at Lexington by D. nitidali

MELON APHID (Aphis gossypii Glov.)

Delaware. L. A. Stearns (August 10): Severe infestation, with characteristic injury and considerable crop loss, to cantaloups in the Felton-Viola section of Kent County.

Indiana. J. J. Davis (August 28): Abundant and destructive to melons generally over the State.

Minnesota. H. Milliron (August 18): Very abundant on cucumber at Shokopee.

Kansas. H. R. Bryson (August 25): Where control measures not applied effectively melon and cucumber vines destroyed.

Utah. G. F. Knowlton and F. C. Harmston (August 4): Cantaloups at Green River damaged and watermelon foliage at Taylor and Riverdale.

ASPARAGUS

ASPARAGUS BEETLE (Crioceris asparagi L.)

South Carolina. J. G. Watts (August): Noticeably less abundant than usual at Blackville.

Ohio. E. W. Mendenhall (August 15): Considerable damage to asparagus in Clark County.

Minnesota. H. Milliron (August 18): C. duodecimpunctata L. not very abundant on asparagus at Saint Anthony Park.

Utah. G. F. Knowlton (August 14): Adults abundant and mating at Marriott, Farmington, Syracuse, and Sunset. Slugs and some eggs present, and moderate injury to many plants.

Washington. R. D. Eichman (August 22): Light damage to asparagus in Prosser and Walla Walla. Many adults found on the plants, eggs abundant, but few larvae present. Control measures generally used.

CELERY

GREENHOUSE LEAF TIER (Phlyctaenia rubigalis Guen.)

Indiana. J. J. Davis (August 28): Some injury to celery at Fulton, north-central Indiana.

EGGPLANT

POTATO STALK BORER (Trichobaris trinotata Say)

Ohio. N. F. Howard (August 7): Specimens found in eggplant at South Point. It destroyed most of the plants in one planting of ¼ or 1/3 acre and has accounted for the loss of plants in some other plantings. (Det. by L. L. Buchanan.) Triaspis curculionis Fitch, a braconid, was collected on this weevil on August 1. (Det. by C. F. W. Muesebeck.)

ONIONS

ONION THRIPS (Thrips tabaci Lind.)

Connecticut. N. Turner (August 22): As onions were killed, migrating thrips fed heavily on cabbage and cauliflower plants. Some damage.

New York. N. Y. State Coll. Agr. News Letter (August 7): In eastern New York on Long Island and in Orange County thrips have been quite injurious to onions but are now decreasing. (August 14): Infestations very heavy in Genesee County on maturing onions.

South Dakota. H. C. Severin (August 12): Especially abundant in the Black Hills territory and considerable damage caused.

RHUBARB

RHUBARB CURCULIO (Lixus concavus Say)

Nebraska. M. H. Swenk (August 15): Reported as attacking rhubarb in Boone County on July 17.

A TERMITE (Reticulitermes tibialis Banks)

Nebraska. M. H. Swenk (August 15): Rhubarb plants in Nuckolls County reported as being attacked on August 2.

LETTUCE

SIX-SPOTTED LEAFHOPPER (Macrosteles divisus Uhl.)

New York. N. Y. State Coll. Agr. News Letter (August 14): At Gabriels, Franklin County, abundant on lettuce, with some yellows evident. (August 21): This is the first season on Staten Island that growers have asked for control information for this insect on escarole and endive. In severe infestations leaf curling and stunting resulted, in addition to high percentages of yellows.

SWEET CORN

CORN EAR WORM (Heliothis armigera Hbn.)

Connecticut. N. Turner (August 22): In southern Connecticut one large field of late sweet corn was 15-percent infested. Another 2-acre field at least 75-percent infested. Apparently more abundant than usual.

New York. N. Y. State Coll. Agr. News Letter (August 21): On Long Island moths are abundant, and most ears infested. More numerous than usual on Staten Island. Infestation runs about 20 percent. In Rockland, Westchester, and Ulster Counties infestations run from 15 to 30 percent. In western New York generally present in Erie and Orleans Counties.

Pennsylvania. L. E. Dills (July 19): Fairly abundant on some early plantings of sweet corn. Damage severe.

Virginia. H. G. Walker and L. D. Anderson (August 25): Very scarce on sweet corn maturing late in July and early in August. Moths and eggs very abundant in a field of corn just silking at Norfolk.

Indiana. E. V. Walter (August 21): Examination of sweet corn harvested in test plots at La Fayette during the period August 7-19 shows slightly less than 1 percent of the ears infested. Earlier corn had a slightly heavier infestation.

Kentucky. M. L. Didlake (August 25): Sweet corn harvested on August 8 at Lexington had an infestation of 35 percent.

Mississippi. C. Lyle (August 24): Heavy damage to corn and tomatoes reported in the Meridian district.

Missouri. L. Haseman (August 25): Since the middle of August sweet corn at Columbia has been showing a very heavy infestation, although it was light earlier in the season.

Nebraska. M. H. Swenk (August 15): Complained of as doing serious damage to sweet corn in Harlan County during the second week in August.

Utah. G. F. Knowlton (August 25): Extensive damage to sweet corn in Utah, Box Elder, and Davis Counties.

Washington. L. G. Smith (August 22): At Prosser moths quite numerous in lima bean fields. Some damage to this crop noted last year. Abundant in home gardens at Yakima.

R. S. Lehman (August 21): Noted as feeding on pods of string beans planted next to corn at Walla Walla, where it has also been very injurious to corn all season.

Correction

Washington. L. G. Smith (August 17): In the Insect Pest Survey Bulletin dated August 1, 1939 (v. 19, No. 6, p. 390) the Washington report under strawberry crown borer (Tyloderma fragariae Riley) should have appeared under the strawberry crown miner (Aristotelia fragariae Busck).

PEPPER

A BURROWER BUG (Pangaeus bilineatus Say)

Florida. A. N. Tissot (August 24): Pepper seed beds at Fort Myers being severely injured on August 2. Beds mulched with grass and weeds, which probably was the cause of the bugs' congregating in such large numbers.

C O T T O N I N S E C T S

BOLL WEEVIL (Anthonomus grandis Boh.)

Virginia. W. J. Schoene (August 21): Reported as causing serious losses in Greenville, Southampton, and Nansemond Counties. Injury greater than for some years.

South Carolina. F. F. Bondy, et al. (August 26): Moving about a great deal in Florence County, largely owing to lack of food. Apparently about normal number in the fields.

Georgia. L. W. Morgan (August 25): Damage continues in untreated fields in Lowndes and Echols Counties and, since there are no squares on which to feed, all damage is to grown bolls.

P. M. Gilmer, et al. (August 5): Infestation increased during the week in Cook, Berrien, and Tift Counties. Untreated cotton showed infestations of approximately 90 percent. (August 12): Apparently the peak of mid-summer migration in Tift, Cook, Berrien, Lowndes, and Echols Counties is now past, and weevils, while still entering fields in large numbers, are not quite so numerous as in previous weeks. Plentiful in all fields and may be found, even in well-treated cotton, in some 10 to 20 percent of forms examined. (August 19): Damage on untreated fields continued to rise, but on treated fields, while rising, did so at a much slower rate than previously. Boll damage has risen somewhat, but on plats with a fair number of squares, infestation has risen only to about 25 percent.

O. I. Snapp (August 16): Infestation at Fort Valley, central Georgia, less than that of an average year.

Florida. C. S. Rude and assistants (August 5): Twenty-seven fields examined during the week in Alachua, Gilchrist, Marion, Putnam, Union, and Lake Counties. Three fields in which infestation had not been found this season were found infested, but punctured squares were found at only one point in each case. For the week ended August 7, 1937, infestation averaged 32.25 percent; for the week ending August 6, 1938, it averaged 73 percent; and this year the average is 49 percent. (August 12): Only 16 fields inspected during the week. In most fields visited the squares left on the plants have been practically consumed. Egg deposition apparently occurring only in bolls. In most fields adults are feeding on the boll walls, even mature bolls being affected. Average infestation was 50 percent, with a range of from 4 to 97 percent. (August 19): Infestation ranges from 55 to 100 percent in fields examined this week. In only three or four of the fields were infestations below 90 percent. Increase is partly owing to the small number of squares and the small bolls. Infestation about the same as last year. (August 26): Twenty-five fields visited during the week. In most fields infestation is heavy, ranging from 80 to 100 percent in instances where it was possible to make counts. Damage to bolls showing up in most fields, estimated as from insignificant to 50 percent. Infestation, as compared to that for the same period last year, is about the same except in Lake County, where last season it ranged from 2 to 4 percent and this year from 10 to 95 percent.

Alabama. J. M. Robinson (August 18): Abundant over entire State.

Mississippi. C. Lyle (August 24): Very abundant throughout the season, and considerable damage done to late cotton where no control measures were applied. Infestation in general about the same as in 1938.

Louisiana. R. C. Gaines and assistants (August 19): In Madison Parish at this time in 1938, records were possible on only 1 test, averaging 91.5 percent of punctured squares. Records made this year on 17 tests, averaging 81.2 percent of punctured squares and ranging from 64.3 to 90.7 percent.

C. O. Eddy (August 23): Infestation still very high on late cotton.

Oklahoma. C. F. Stiles (July 31): The hot, dry weather of the last 2 weeks has checked infestations to some extent. (August 24): Reported in unusually large numbers in Seminole County.

Texas. F. L. Thomas (August 1): Hot weather and rapidly maturing cotton probably responsible for holding weevils in check. Infestation in Burleson, Falls, Limestone, and McLennan Counties has appeared to increase, being due to the scarcity of squares. (August 23): Local showers, spotted in occurrence, rather general throughout the State and favorable for multiplication. Movement of weevils to fruiting cotton has been heavy. Even young bolls being severely damaged in many fields, especially in central and west-central Texas.

C. R. Parencia and S. E. Jones (August 12): Increasing rapidly in all but a few fields in Calhoun County. In many fields practically every square is punctured. Some squares have four to five egg punctures.

K. P. Ewing, et al. (August 26): Very numerous in most of the late-planted cotton in McLennan, Falls, and Limestone Counties during the week. In one field, consisting of approximately 500 acres of early planted cotton examined this week weevils had totally ruined about two-thirds of the bolls. Yield estimated as reduced from approximately ½ to 1/5 bale per acre.

BOLLWORM (Heliothis armigera Hbn.)

Georgia. P. M. Gilmer, et al. (August 19): Damage has increased markedly over last week in Tift, Berrien, Cook, Lowndes, and Echols Counties. In some fields 8 to 10 percent of the bolls attacked. Small larvae still plentiful.

T. Thompson (August 22): Apparently very severe, local damage in one field of cotton in Seminole County. Observed on August 4.

Florida. A. N. Tissot (August 24): Sent in from Tallahassee on August 14 and from DeFuniak Springs on August 21. At the latter place larvae reported as having destroyed half of the bolls in some fields.

C. S. Rude and assistants (August 26): Still doing a good deal of damage to bolls in many fields in Alachua, Gilchrist, Marion, and Lake Counties.

Alabama. J. M. Robinson (August 18): Found on cotton at Moulton and Geneva on August 14.

Mississippi. C. Lyle (August 24): Light infestations reported from the northeastern section and the Meridian district. Specimens feeding in cotton bolls received from Covington, Holmes, Pontotoc, Quitman, and Walthall Counties between July 31 and August 17.

R. L. McGarr, et al. (August 5): Noticeable damage in some of the experimental cuts in Oktibbeha County. Damage in this section more general than during any of the last few years, or at least since 1934.

E. W. Dunnam, et al. (August 19): Present in Washington County during the entire season, but not much damage done.

Texas. K. P. Ewing, et al. (August 5): In examining 3,900 cotton terminals in 14 fields of late-planted cotton in the vicinity of Waco, McLennan County, during the week, 903 eggs were found, the number of eggs per 100 terminal buds in these fields ranging from 5.0 to 72.3, with an average of 23.2 eggs per 100 terminals. Average per 100 terminals for last week was 9.3 and for the week ending July 22 was 7.4, showing a very marked increase in oviposition in late-planted cotton.

C. R. Parencia and S. E. Jones (August 5): Heavy infestation observed in one field in Calhoun County.

A. J. Chapman (August 12): Considerable damage in spotted locations in Presidio County. Damage more apparent in the later planted cotton.

Arizona. W. A. Stevenson (August 19): Recent examination of one field of short-staple cotton near Tubac, Santa Cruz County, showed 5.2 percent of the bolls to be injured.

COTTON LEAF WORM (Alabama argillacea Hbn.)

Georgia. L. W. Morgan (August 25): A few found in Echols County but no great amount of damage.

Florida. C. S. Rude and assistants (August 12): A few in many fields in Alachua, Union, Marion, and Lake Counties, but they seemed to have been held in check by some factor. (August 26): Cotton in part of Gilchrist County stripped of tender parts. Moths migrating from those fields.

Mississippi. C. Lyle (August 24): The first larvae found in Mississippi were on July 29 in George County; later found in Jackson County. On August 14 reported from Washington County and on the same date found generally distributed in Tate County. Larvae found at State College on August 17. Recent investigations in George County showed that parasites had prevented much of the expected damage.

Louisiana. C. O. Eddy (August 23): Abundant in local areas in northern Louisiana.

R. C. Gaines and assistants (August 26): So far as is known no control is necessary in Madison Parish. In Richland Parish considerable ragging of cotton reported, necessitating treatment.

Texas. F. L. Thomas (August 9): Less damaging than in the last several years. Larvae have appeared in Kaufman County, northern Texas, Runnels County, west-central Texas, and at Presidio, in the Big Bend, but no ragging caused except in a few locations. (August 16): Severe ragging in the coastal bend region, and control measures general in the upper coastal area, with some control being used as far north as McLennan County.

K. P. Ewing, et al. (August 26): Becoming more numerous in McLennan, Falls, and Limestone Counties, particularly in late-planted cotton. Injurious infestations in several fields. Considering the acreage of early planted cotton, there is comparatively small proportion of infestation in this area.

C. R. Parencia and S. E. Jones (August 19): Most of the cotton in Calhoun County defoliated, with the exception of a few fields that have been treated.

A. J. Chapman (August 19): Cotton in Presidio County not defoliated to any extent.

PINK BOLLWORM (Pectinophora gossypiella Saund.)

Texas. F. L. Thomas (August 9): Infestation heavier and more generally distributed than last year in Cameron County, in the lower Rio Grande Valley.

R. E. McDonald (August 18): By the end of July considerable increase found in the infestation in the 1939 crop in Cameron County and in a comparatively small area in the southeastern part of Hidalgo County. Most heavily infested area is in the southern part of Cameron County next to the river, growing gradually lighter to the north, reaching the limits of the county and over a little into Hidalgo County both northward and westward. Incipient infestations found in the rest of Hidalgo, and in Willacy and Starr Counties.

A. J. Chapman (August 19): Green boll infestation counts made in 29 field in Presidio County during the first 15 days of August. Average infestation was 1.45 percent, with 1.82 larvae per infested boll and 4.24 bolls per plant. Last year for the same period the infestation in these fields averaged 43.41 percent, with 2.21 larvae per boll and 6.25 bolls per plant.

COTTON FLEA HOPPER (Psallus seriatus Reut.)

Oklahoma. C. F. Stiles (July 31): Reported in large numbers and as damaging cotto in Beckham County.

Texas. F. L. Thomas (August 9): Abundant and causing injury on young cotton in most areas of central and northern Texas. Counts in such fields range from 75 to 120 flea hoppers per 100 terminal buds. Little change during the last week in the infestations in Crosby, Dickens, and Lubbock Counties, northwestern Texas, which have from 15 to 34 flea hoppers per 100 terminals.

K. P. Ewing, et al. (August 5): In cotton planted about May 26 at Waco, 300 terminal buds inspected in the check plots of one of these experiments showed an average of 11.3 adults and 72.7 nymphs, or a total of 84 per 100 buds. In the experiment started this week 1,500 terminal buds showed an average of 13.9 adults and 89.2 nymphs, or a total of 103.1 per 100 buds. Average per field in the late-planted cotton was 12.6 adults and 81 nymphs.

or a total of 93.6 per 100 buds, a slight reduction from the infestation in young cotton last week, the average then being 119.9 per 100 buds. (August 26): Below the damage point in practically all fields of late-planted cotton in McLennan, Falls, and Limestone Counties. Average infestation in the check plots of two experiments located in late-planted cotton was 11.3 and 18.3 flea hoppers per 100 buds, respectively. This is a reduction from an average of 45.5 flea hoppers per 100 buds last week.

C. R. Parencia and S. E. Jones (August 19): Infestation not as high in Calhoun County as in the past.

APHIDS (Aphiidae)

South Carolina. F. F. Bondy, et al. (August 26): Leaf aphids are fairly numerous on some treated fields in Florence County but not so numerous as in 1938.

Georgia. P. M. Gilmer, et al. (August 12): Increasing in treated fields of Sea Island in Tift, Cook, Berrien, Lowndes, and Echols Counties. No commercial damage. (August 19): Continuous, heavy rains have reduced infestations.

L. W. Morgan (August 25): A heavy infestation on all cotton that has not shed its leaves in Lowndes and Echols Counties.

Florida. C. S. Rude and assistants (August 5): Leaves caused to fall in fields which have been treated consistently in Alachua, Gilchrist, Marion, Putnam, Union, and Lake Counties. A noticeable scarcity of ladybeetles in such fields. (August 26): Becoming less abundant.

Mississippi. C. Lyle (August 24): The cotton aphid (Aphis gossypii Glov.) is reported as numerous only in fields that have been treated for boll weevils.

R. L. McGarr, et al. (August 19): Still very numerous in a few of the experimental cuts in Oktibbeha County.

Louisiana. R. C. Gaines and assistants (August 26): Infestation has increased in most fields in Madison Parish that have been treated and in many fields that have not been treated. In some fields the shedding of the bottom leaves caused by aphids may prove to be beneficial instead of injurious, as it may prevent the destruction of the bottom bolls by boll rot.

A COTTON LEAF WORM (Prodenia litura F.)

Egypt. A. H. Rosenfeld (July 12): Egg masses continued to appear in all localities but in diminishing quantities, the infestation on the whole being lighter than last year, when it reduced the crop by about half a million bales. Hatching occurred in small areas that had escaped the collection of egg masses, particularly in the northern Delta, but only light damage was caused.

F O R E S T A N D S H A D E - T R E E I N S E C T S

GYPSY MOTH (Porthetria dispar L.)

Vermont. A. F. Burgess (August 5): Numerous adult males taken from tanglefoot surrounding cages put out in Vermont, New York, and Pennsylvania this season. It is evident from the moths taken at cages in Vermont that there has recently been considerable wind spread of young caterpillars from the heavily infested sections near the Connecticut River into the zone area just north of Rutland, in both Addison and Rutland Counties.

Pennsylvania. A. F. Burgess (August 12): Infestation was discovered in Spring Brook Township, Lackawanna County, a preliminary survey of which indicated the presence of some 46 egg clusters. Adult males continued to be recovered from tanglefoot at some of the cages in Pennsylvania.

FOREST TENT CATERPILLAR (Malacosoma disstria Hbn.)

Connecticut. P. Wallace (July 18): Only an occasional individual in Cornwall and Goshen. No damage noted this season.

New York. R. T. Webber (August 19): Abundant in several localities of Broome County. Many sugar maple and other deciduous trees had suffered heavy defoliation and had partly refoliated by August 18.

FALL WEBWORM (Hyphantria cunea Drury)

Vermont. H. L. Bailey (August 25): Unusually abundant throughout the State.

Massachusetts. A. I. Bourne (August 22): Generally somewhat less abundant than usual; however, reports from the eastern part of the State indicate that it is slightly more abundant than in 1938, when it reached practically its lowest ebb in that section.

Connecticut. P. Wallace (July 18): Common everywhere but not causing much damage.

Rhode Island. A. E. Stene (August 24): In some instances appeared in large enough numbers almost to completely cover a tree with webs.

New York. R. E. Horsey (July 24): Noted on cotoneaster and tupelo in Rochester.

Maryland. E. N. Cory (August 17): Attacking fruit trees at Grantsville.

Virginia. H. G. Walker and L. D. Anderson (August 25): Rather abundant in eastern Virginia.

Georgia. T. Thompson (August 22): Observed during the latter half of August webbing persimmon and other trees along roadsides in Thomas County.

Florida. A. N. Tissot (August 24): Becoming fairly common in pecan groves, and individual trees rather severely injured.

Mississippi. C. Lyle (August 24): Very general infestation over the State, with a heavy infestation reported from the northeastern section.

Ohio. E. W. Mendenhall (August 19): In central Ohio it is a general feeder in considerable abundance on many trees.

G. A. Runner (August 17): Abundant throughout the lake counties on a good many of its usual host plants.

Indiana. L. F. Steiner (August 22): More abundant on shrubbery and on fruit and shade trees in and near Vincennes than at any time during the last 6 years.

HICKORY TUSSOCK MOTH (Halisidota caryae Harr.)

Connecticut. B. H. Walden (August): More abundant than usual on apple, elm, oak, and hickory.

Pennsylvania. L. E. Dills (August 23): Larvae feeding on walnut and linden on July 25. Uniformly distributed in northeastern and north-central parts of the State.

MOURNING-CLOAK BUTTERFLY (Hamadryas antiopa L.)

Washington. L. G. Smith (August 1): Larval specimens sent in with the report that they were causing considerable damage in San Juan County.

SCALLOP-SHELL MOTH (Calocalpe undulata L.)

Pennsylvania. L. E. Dills (August 23): Serious damage during July to foliage of wild cherry in many western counties.

A SPHINX MOTH (Pholus satellitia pandorus Hbn.)

Vermont. H. L. Bailey (August 25): Specimens of nearly full-grown larvae received since August 20 from several points in and about Montpelier.

BAGWORM (Thyridopteryx ephemoraeformis Haw.)

Maryland. E. N. Cory (August 18): Rather abundant and attacking evergreens throughout Maryland.

District of Columbia. L. G. Baumhofer (August 16): During July and early in August many requests for information received from residents of Washington and vicinity, indicating an abundane of this insect this season.

Virginia. H. G. Walker and L. D. Anderson (August 25): Rather abundant on cedar, arborvitae, and other ornamental plants in eastern Virginia this year.

Alabama. J. M. Robinson (August 18): Reported on arborvitae at Brent and Jasper on July 20.

Mississippi. C. Lyle (August 24): Specimens received from Coahoma County on July 31. Reports of injury received from Covington County and from the central section of the State.

Ohio. J. N. Knull (August 15): Larvae doing some damage to arborvitae and juniper at Columbus.

Indiana. J. J. Davis (August 28): Frequently reported from the southern third of the State as feeding on cedar, arborvitae, pine, and spruce.

Kentucky. M. L. Didlake (August 25): Unusually abundant, mostly on evergreens, in localities scattered throughout the State.

Michigan. R. Hutson (August 22): Reported at Lake City and Detroit on arborvitae.

Oklahoma. F. A. Fenton (August 19): Found on evergreen at Oilton, Creek County.

Texas. R. K. Fletcher (August 12): Reported from Bell, Harris, and Erath Counties, east-central Texas.

OYSTERSHELL SCALE (Lepidosaphes ulmi L.)

New York. R. E. Horsey (August 19): Several small ash trees at Rochester found badly incrusted. Fairly common.

ASH

AN ASH FLOWER GALL (Eriophyes fraxiniflora Felt)

New York. R. E. Horsey (August): On July 29 very numerous on a white ash in Rochester. The galls formed this year are rather ornamental, being green like the leaves. The blackened galls from last year, some of which are still on the tree, are unsightly.

Utah. G. F. Knowlton (July 10): Ash infested with this mite at Logan. (Det. by H. H. Keifer.)

BEECH

A BRANCH PRUNER (Xylotrechus quadrimaculatus Hald.)

Massachusetts. E. P. Felt (August 21): Found somewhat abundantly in beech at Chatham.

BIRCH

BRONZED BIRCH BORER (Agrilus anxius Gory)

New York. R. E. Horsey (August 18): A number of European white birches, 25 to 30 feet in height, are dying or dead at Rochester and Irondequoit. This insect killed about all the European birches in this vicinity years ago, and the trees planted in recent years are now dying.

Ohio. E. W. Mendenhall (August 19): Injurious on white birch in Columbus and throughout southwestern Ohio. Also injurious in Delaware and vicinity, central Ohio.

Indiana. J. J. Davis (August 28): Reported as destructive more frequently than for the last 20 years, chiefly from central and northern Indiana.

BOXELDER

BOXELDER BUG (Leptocoris trivittatus Say)

Michigan. R. Hutson (August 22): First specimens for the season arrived today from Garden City.

North Dakota. J. A. Munro (August 22): Moderately abundant at Fargo.

Montana. D. J. Pletsch (August 5): On and near a boxelder tree on the experiment station grounds at Huntley. A few specimens causing annoyance.

Idaho. F. H. Shirck (August 21): Reported as very troublesome, invading a house in the vicinity of Parma. Relief obtained by control measures.

Utah. G. F. Knowlton (August 12): Annoying in houses at Salt Lake City and Bountiful.

CATALPA

CATALPA SPHINX (Ceratomia catalpae Bdv.)

Ohio. J. N. Knull (August 15): Many catalpas in Columbus being defoliated.

Indiana. J. J. Davis (August 28): Abundant and defoliating many catalpa groves in the northern half of the State.

Kentucky. M. L. Didlake (August 25): Defoliating trees at Lexington.

Mississippi. C. Lyle (August 24): Reported as defoliating catalpa trees in Grenada County.

COMSTOCK'S MEALYBUG (Pseudococcus comstocki Kuw.)

Ohio. E. W. Mendenhall (August 4): Some damage to catalpa leaves in a street planting in Columbus. (Det. by J. S. Houser.)

CHESTNUT

A CHESTNUT APHID (Calaphis castaneae Fitch)

New Jersey. M. D. Leonard (August 10): A number of head-high chestnut seedlings examined at Ridgewood, and 2 or 3 alates and about 6 apterae found on the undersides of leaves.

CYPRESS

A CYPRESS MOTH (Argyresthia cupressella Wlsm.)

Washington. M. J. Forsell (June 30): Cypress moths from the Montlake district of Seattle, where this pest is very destructive. (Det. by A. Busck.)

ELM

ELM LEAF BEETLE (Galerucella xanthomelaena Schr.)

Massachusetts. A. I. Bourne (August 22): Very severe damage caused in towns in eastern part of the State, especially in Norfolk, Bristol, and Plymouth Counties.

C. N. Smith (July 28): Extensive destruction of foliage of elm shade trees at Vineyard Haven, on Martha's Vineyard.

Connecticut. P. Wallace (July 18): Complete skeletonization of leaves of a few elms in various towns. Nowhere serious except on a few individual trees. Noted in Derby, Shelton, Branford, Ansonia, Woodbury, Cornwall, and Seymour.

New York. C. W. Collins and R. T. Webber (August 19): Noted to be causing severe injury to elm foliage in some localities of Rockland, Orange, and Dutchess Counties, eastern New York.

Pennsylvania. L. E. Dills (August 23): Increased in the northeastern counties this year, and second-brood adults observed during July.

Virginia. A. M. Woodside (August 21): Common in Augusta County and has caused considerable damage to elms.

Ohio. J. S. Houser (July 31): Recently found at Bluffton, 60 miles from the northern boundary of the State. This is the farthest north the insect has been discovered.

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E. W. Mendenhall (August 14): Abundant on Chinese elms in nurseries at Columbus. English elms also badly infested. Second brood now appearing but not as bad as the first.

Utah. G. F. Knowlton (July 31): Seriously damaging elms at Smithfield, 13 trees on 1 property being largely skeletonized and every leaf examined conspicuously injured.

EUROPEAN ELM SCALE (Gossyparia spuria Mod.)

Indiana. J. J. Davis (August 28): Reported as abundant on elm, especially in the central and northern parts of the State.

Utah. G. F. Knowlton (July 31): Damaging many elms at Logan, Ogden, and Salt Lake City.

FIR

A TORTRICID (Epinotia meritana Heinr.)

Utah. J. A. Beal (August 18): Defoliation of Abies concolor in Bryce Canyon National Park much more severe than in previous years. (Det. by D. DeLeon.)

HICKORY

HICKORY LEAF STEM GALL (Phylloxera caryaecaulis Fitch)

New Jersey. E. P. Felt (August 21): Extremely abundant on hickories at Short Hills.

LARCH

LARCH SAWFLY (Lygaeonematus erichsonii Htg.)

West Virginia. B. H. Wilford (August 12): Reported as causing much defoliation of larch on a plantation on the Monongahela National Forest. This insect was first noticed on larch once in 1937. In 1938 it caused only a little defoliation. (Det. by R. A. Cushman.)

LINDEN

LINDEN WART GALL (Cecidomyia verrucicola O. S.)

New York. E. P. Felt (August 21): Extremely abundant on linden leaves in the vicinity of Albany.

AN APHID (Myzocallis tiliae L.)

New Jersey. M. D. Leonard (August 10): A number of large city basswood trees at Ridgewood have been previously reported as infested with this aphid. Today found to be very lightly infested, an occasional leaf having 1 or 2 aphids or so on the underside. Several alates seen.

LOCUST

LOCUST LEAF MINER (Chalepus dorsalis Thunb.)

Massachusetts. A. I. Bourne (August 22): Locusts in southeastern Massachusetts, particularly Plymouth County, showed heavy attack.

Pennsylvania. E. P. Felt (August 21): Reported in injurious numbers from the Philadelphia area.

L. E. Dills (August 23): Serious damage in the southwestern counties.

Virginia. A. M. Woodside (August 21): , Severe and extensive damage to foliage of black locust in Augusta and Rockingham Counties.

Mississippi. C. Lyle (August 24): Locust trees in the northeastern section turned brown by this insect. Injury apparently worse in Union and Pontotoc Counties.

MAPLE

GREEN-STRIPED MAPLE WORM (Anisota rubicunda F.)

Vermont. H. L. Bailey (August 4): An outbreak at Lyndon, Caledonia County, northeastern Vermont. Red maples stripped and some sugar maples more lightly attacked. Some larvae nearly full grown.

Massachusetts. A. F. Burgess (August 21): According to field observations, this pest is quite abundant throughout Berkshire County.

Michigan. E. I. McDaniel (August 24): Specimens received from Manistique, where they were defoliating large areas of maple forest. Many larvae had pupated.

Minnesota. R. H. Nagel (August 17): Complete defoliation of sugar maple observed on both sides of the highway for about a mile near Tower, Saint Louis County. Mountain maple in the area apparently untouched. Larvae mostly mature.

NORWAY MAPLE APHID (Periphyllus lyropictus Kess.)

New Jersey. M. D. Leonard (August 24): Several maple trees under periodic observation at Ridgewood and not infested for some weeks, now have small colonies developing on the undersides of many leaves.

COTTONY MAPLE SCALE (Pulvinaria vitis L.)

Minnesota. H. Milliron (August 18): Abundant on maple and boxelder at Detroit Lakes and Sauk Center.

MOUNTAIN ASH

A SAWFLY (Pristiphora geniculata Htg.)

New Hampshire. T. Parr (August 10): Since August 1 several infestations have been observed, stripping mountain ash on Mt. Osceola, Mt. Passaconaway, and Mt. Whiteface.

OAK

A BUDWORM (Cacoecia fervidana Clem.)

Wisconsin. E. L. Chambers (July 31): Specimens received which had been working on oak in northern Wisconsin and proving to be a very serious pest. (Det. by A. Busck.)

A LACEBUG (Corythucha arcuata Say)

Maryland. E. N. Cory (August 9): Attacking oak at Trappe.

OBSCURE SCALE (Chrysomphalus obscurus Comst.)

New York. E. P. Felt (August 21): Present in small numbers on pin oak at Westbury.

Alabama. J. M. Robinson (August 18): Reported on oaks at Piedmont on July 28.

PINE

WHITE PINE WEEVIL (Pissodes strobi Peck)

Michigan. R. Hutson (August 22): Specimen submitted from Ann Arbor.

Minnesota. H. Milliron (August 18): Very abundant at Saint Cloud in spruce seedlings.

BARK BEETLES (Scolytidae)

Rhode Island. A. E. Stene (August 24): Ips calligraphus Germ. on white pine reported in a number of places, apparently the aftermath of the hurricane.

North Carolina. C. S. Brimley (August 7): Bark beetles (I. calligraphus and Dendroctonus terebans Oliv.) observed since August 2 as severely injuring a pine grove at Reidsville.

B. H. Wilford (August 12): An outbreak of the southern pine beetle (D. frontalis Zimm.) on the Pisgah National Forest near Hot Spring has destroyed about 10 acres of shortleaf pine.

NANTUCKET PINE SHOOT MOTH (Rhyacionia frustrana Comst.)

Pennsylvania. E. P. Felt (August 21): Injury found to be somewhat common in pine tips in the Philadelphia area.

Maryland. E. N. Cory (July 24): Attacking pine at Woodlawn.

Mississippi. C. Lyle (August 24): Pine twigs containing larvae sent from Attala County on August 22.

Missouri. J. A. Denning (August 7): Specimens infesting pine received from Jefferson City. (Det. by C. Heinrich as Rhyacionia sp. presumably frustrana.)

A TIP MOTH (Eucosoma gloriola Heinr.)

Massachusetts. E. P. Felt (August 21): Injury to white pine by this comparatively recent new pest was received from Stockbridge.

SPRUCE BUDWORM (Cacoecia fumiferana Clem.)

Colorado. D. DeLeon (August 18): Attacking ponderosa pine in the Sugarloaf area but seems to have declined in numbers. Has appeared for the first time in numbers in the northern Saint Vrain Canyon, near Estes Park. Defoliation of Douglas-fir more widespread than last year in Douglas-fir stands on the east side, and in many localities so heavy that death of trees may result.

A SPHINX MOTH (Lapara bombycoides Walk.)

Connecticut. G. H. Plumb (August 23): Ten larvae in different stages of development taken in a small planting of red pine at North Haven. Not enough larvae present to cause damage.

RED-HEADED PINE SAWFLY (Neodiprion lecontei Fitch)

Michigan. R. Hutson (August 22): Specimens submitted from Bitely and Boyne City.

Alabama. B. H. Wilford (August 12): A heavy infestation reported on loblolly and shortleaf pines in plantations in northwestern Alabama. (Det. by R. A. Cushman.)

Mississippi. C. Lyle (August 24): Larvae received from Hinds County on August 7, where they were feeding on Cedrus deodara.

INTRODUCED PINE SAWFLY (Diprion simile Htg.)

Connecticut. J. V. Schaffner, Jr. (August 23): Four heavy infestations observed on ornamental jack, Scotch, and white pine trees in residential areas in Hamden and New Haven. In each case only 1 or 2 trees severely infested, and the infestations were from 1 to 5 miles apart.

PINE BARK APHID (Pineus strobi Htg.)

Pennsylvania. L. E. Dills (August 23): Isolated infestations in Monroe County on July 18.

Minnesota. H. Milliron (August 18): Moderately abundant on white pine at Rice.

A SCALE (Toumeyella parvicorne Ckll.)

South Carolina. J. A. Berly (July 22): Scale insects, collected on long leaf pine, received from Camden. (Det. by H. Morrison.)

POPLAR

COTTONWOOD LEAF BEETLE (Chrysomela scripta F.)

Minnesota. H. Milliron (August 18): Abundant at Alexandria on cottonwood.

POPLAR VAGABOND APHID (Mordwilkoja vagabunda Walsh)

G. F. Knowlton (August 14): A few small trees at Myton severely infested.

SPRUCE

EASTERN SPRUCE GALL APHID (Adelges abietis L.)

Maryland. E. N. Cory (August 1): Found at Selbysport.

SITKA SPRUCE GALL APHID (Adelges cooleyi Gill.)

New Hampshire. E. P. Felt (August 21): Reported from Madison.

SPRUCE MITE (Paratetranychus uniunguis Jacobi)

Pennsylvania. L. E. Dills (August 23): Abundant throughout the summer in northeastern and north-central counties.

SYCAMORE

A TUSSOCK MOTH (Halisidota harrisi Walsh)

New Jersey. F. A. Soraci (August 18): As much as 30-percent defoliation on Platanus orientalis at Grantwood and vicinity. Larvae are full or nearly full grown. Parasitized larvae common.

WILLOW

POPLAR AND WILLOW BORER (Sternochetus lapathi L.)

Oregon. W. D. Edwards (August 21): Adults laying eggs in bark of willows, poplars, and birches at Portland and vicinity.

AN APHID (Chaitophorus viminalis Monell)

New Jersey. M. D. Leonard (August 10): Water sprouts on a willow tree at Ridgewood reported as badly infested during July but only lightly infested when examined on August 3 and 10. Dry weather and lady beetles and their larvae seem to be the causes of decrease.

INSECTS AFFECTING GREENHOUSE AND ORNAMENTAL PLANTS

A TUSSOCK MOTH (Hemerocampa definita Pack.)

Massachusetts. E. P. Felt (August 21): The yellow-headed tussock caterpillar was reported as injuring hydrangeas, vines, and other leaves at Lenox.

EIGHT-SPOTTED FORESTER (Alypia octomaculata F.)

Nebraska. M. H. Swenk (August 15): Larvae were found on July 17 to be feeding on the leaves of woodbine in Webster County.

A BILLBUG (Calendra tarda Fall)

California. R. Cecil (August 17): Larvae feeding on grass roots killing the Kentucky bluegrass at Ventura. In lawns of mixed grass only the Kentucky bluegrass is killed. This is the first year we have noticed this insect in this vicinity. (Det. by L. L. Buchanan.)

HAIRY CHINCH BUG (Blissus hirtus Montd.)

New York. N. Y. State Coll. Agr. News Letter (August 7): Many of the lawns in Suffolk County, eastern New York, are infested. (August 21): An average of 5 to 10 calls a day in Westchester County on these bugs, which are causing considerable damage, especially during the dry period.

Florida. A. N. Tissot (August 24): The chinch bug (B. insularis Barber) was damaging a lawn in Saint Petersburg on August 12.

CITRUS WHITEFLY (Dialeurodes citri Ashm.)

Mississippi. C. Lyle (August 24): Reported as rather numerous in the southern part of the State. In at least one place the adults were causing trouble in restaurants. Specimens received from Madison and Pike Counties on crapemyrtle, gardenia, and privet.

MEALY FLATA (Ormenis pruinosa Say)

Oklahoma. F. A. Fenton (August 19): Found on plants at Oklahoma City in the central part of the State.

GOLDENGLOW APHID (Macrosiphum rudbeckiae Fitch)

Utah. G. F. Knowlton (August 18): The cone flower aphid is injuring goldenrod and chrysanthemums at Kaysville and hollyhock and asters at Logan.

AN APHID (Capitophorus gillettei Theob.)

New York. M. D. Leonard (August 21): For several weeks Polygonum pennsylvanicum plants in pots at Flushing were thoroughly infested The undersides of the leaves developed almost a solid crust of aphids. More recently the infestation has become very light.

MEALYBUGS (Pseudococcus spp.)

Virginia. H. G. Walker and L. D. Anderson (August 25): Attacking gardenia, euonymus, and other ornamental plants at Norfolk, Portsmouth, and Virginia Beach.

Ohio. E. W. Mendenhall (August 4): P. comstocki Kuw. doing considerable damage to outdoor petunia plants in some places in Columbus. (Det. by J. S. Houser.)

WHITE PEACH SCALE (Aulacaspis pentagona Targ.)

New Jersey. E. P. Felt (August 21): Extremely abundant on lilac stems at Short Hills.

Maryland. E. N. Cory (July 20): Attacking Japanese cherries at Mount Rainier.

Virginia. H. G. Walker and L. D. Anderson (August 25): Several requests for control on many ornamental plants, but this insect does not appear to be as injurious this year as last.

COTTONY-CUSHION SCALE (Icerya purchasi Mask.)

Virginia. R. I. Bosman (July 31): On boxwood, ivy, and other shrubs from Norfolk. (Det. by Louise M. Russell.)

Mississippi. C. Lyle (August 24): Specimens received from Hancock and Jones Counties on July 28 and August 4, respectively.

SOFT SCALE (Coccus hesperidum L.)

Minnesota. H. Milliron (August 18): Abundant on English ivy at Saint Paul.

CYCLAMEN MITE (Tarsonemus pallidus Banks)

Virginia. H. G. Walker and L. D. Anderson (August 25): A greenhouse grower at Norfolk has been having considerable trouble with these mites on snapdragons.

BUCKTHORN

PUTNAM'S SCALE (Aspidiotus ancylus Putn.)

Minnesota. H. Milliron (August 18): Abundant on Rahmnus sp. at Saint Paul.

CANNA

LARGER CANNA LEAF ROLLER (Calpodes ethlius Cram.)

Georgia. T. L. Bissell (August 11): Full-grown larvae badly ragged a clump of canna at Griffin, central Georgia, on July 24. On August 6 very small larvae were just starting on plants.

COLUMBINE

COLUMBINE BORER (Papaipema purpurifascia G. & R.)

Connecticut. Beatrice M. Hinkle (August 8): Borers infesting roots on crowns of columbine plant at Washington on August 2.

COLUMBINE LEAF MINER (Phytomyza minuscula Gour.)

New Jersey. M. D. Leonard (August 10): Abundant and apparently fresh mines continuing almost to fill newer leaves as they open up. Observations made on a number of plants kept under observation at Ridgewood.

AN APHID (Pergandeidia trirhoda Walk.)

New Jersey. M. D. Leonard (August 10): This columbine aphid very scarce on a number of plants kept periodically under observation at Ridgewood.

DAHLIA

SUNFLOWER WEEVIL (Rhodobaenus tredecimpunctatus Ill.)

Georgia. T. L. Bissell (August 19): Two reports of injury to dahlia at Experiment, central Georgia, have been received. In one instance both leaf bases and the main stem were mined.

EUONYMUS

EUONYMUS SCALE (Chionaspis euonymi Comst.)

Maryland. E. N. Cory (July 20): Attacking euonymus at Cumberland.

Virginia. H. G. Walker and L. D. Anderson (August 25): Rather abundant on many euonymus plantings at Norfolk.

Mississippi. C. Lyle (August 24): Reported as abundant in the central and northeastern sections and the Meridian district. Specimens received on July 20 from Monroe County.

FERN

FERN SCALE (Pinnaspis aspidistrae Sign.)

Alabama. J. M. Robinson (August 18): Reported on ferns at Cullman on July 24.

GLADIOLUS

GLADIOLUS THRIPS (Taeniothrips simplex Morison)

Rhode Island. A. E. Stene (August 24): Appear to be more abundant than for 2 or 3 years past.

Minnesota. H. Milliron (August 18): Abundant on gladiolus at Alexandria.

HAWTHORN

AN APHID (Eriosoma crataegi Oestlund)

New York. M. D. Leonard (August 21): This woolly hawthorn aphid quite abundant on twigs of several trees in Flushing. First observed the last of July and still present.

IRIS

IRIS BORER (Macronoctua onusta Grote)

Michigan. E. I. McDaniel (August 24): Specimens of pupae received today from Pontiac, where they had caused considerable damage and loss on one of the large plantings.

JUNIPER AND CEDAR

CEDAR BARK BEETLE (Phloeosinus dentatus Say)

Nebraska. M. H. Swenk (August 15): Report from Seward County on July 29 that cedar trees were being attacked by this engraver beetle.

JUNIPER WEBWORM (Dichomeris marginellus F.)

Ohio. E. W. Mendenhall (August 19): Quite bad in Irish juniper stock in nurseries in Franklin County.

JUNIPER SCALE (Diaspis carueli Targ.)

New York. R. E. Horsey (August 25): Numerous on Pfitzer juniper in a yard at Rochester.

Michigan. R. Huston (August 22): Observed at Big Rapids.

LAUREL

AN APHID (Thoracaphis umbellulariae Essig)

California. E. O. Essig (August 19): This aphid gradually spreading onto the native California laurel at Bolinas, near San Frnacisco Bay. First noted at Berkeley in 1929.

LILAC

LILAC BORER (Podosesia syringae Harr.)

Oklahoma. F. A. Fenton (August 19): Found on lilac bushes at Ponca City, Kay County.

MAGNOLIA

MAGNOLIA SCALE (Neolecanium cornuparvum Thro)

New York. R. E. Horsey (August 15): Young scales are moving and very numerous on magnolia at Rochester.

PYRACANTHA

LEAF CRUMPLER (Mineola indigenella Zell.)

Texas. R. K. Fletcher (August 12): Sent in from Tarrant County, collected from the ornamental pyracantha. This is the first time it has been reported to this office from northern Texas.

RHODODENDRON

RHODODENDRON LACEBUG (Stephanitis rhododendri Horv.)

Connecticut. E. P. Felt (August 21): The second brood was somewhat abundant at Stamford.

ROSE

MOSSY ROSE GALL (Rhodites rosae L.)

Minnesota. H. Milliron (August 18): Abundant on rose at Fergus Falls.

ROSE APHID (Macrosiphum rosae L.)

New Jersey. M. D. Leonard (August 10): Very scarce and only on occasional tender shoots on many rose bushes examined at Ridgewood.

SNOWBALL

A MITE (Epitrimerus sp.)

Iowa. G. R. Titus (August 1): Microscopic plant mite on surface of leaves of Viburnum lentago, collected at Des Moines. None of the V. prunifolium growing against the V. lentago affected. (Det. by H. H. Keifer.)

WATERLILIES

A PYRALID BORER (Nymphula gyralis Hulst)

Georgia. C. H. Alden (July 22): Borers breeding in waterlilies received from Clarkeston. (Det. by C. Heinrich.)

INSECTS ATTACKING MAN AND DOMESTIC ANIMALS

MAN

MOSQUITOES (Culicinae)

North Carolina. C. S. Brimley (August 11) The yellow-fever mosquito (Aedes aegypti L.) biting people and causing much annoyance in daytime at Raleigh.

Florida. F. C. Bishopp (August 10):. Southern salt-marsh mosquito (A. taeniorhynchus Wied.) present in very annoying numbers at Fort Pierce. Some present in well-screened public buildings. These mosquitoes believed to be a persistent residue from the original July brood, as recent conditions have not been favorable for the development of additional broods.

W. V. King (July 31): Reports and light-trap collections have indicated that very severe outbreaks of mosquitoes have occurred during June and July in nearly all of the east-coast counties and in most of the southern area of the west coast of Florida. Numbers obtained from traps in Pinellas, Hillsborough, Saint Lucie, and Palm Beach Counties apparently much larger than those obtained at any time during the last 5 years. Salt-marsh mosquitoes (A. sollicitans Walk.) continuously troublesome in Volusia County during July but a gradual decrease was indicated the last week of the month.

J. B. Hull (July 1): Just after July 1, the Saint Lucie section experienced the heaviest flight of salt-marsh mosquitoes that has occurred in several years. The flight was not confined to salt-marsh breeders, however, as fresh-water species were also numerous, especially Psorophora columbiae D. & K.

Oregon. H. H. Stage (July 31): Isolated outbreaks of Culex pipiens L. and C. tarsalis Coq. reported from Portland and Lebanon, respectively.

Utah. G. F. Knowlton (August 17): Mosquitoes, Aedes sp., abundant and very annoying to man and livestock in fields at Appledale, Corrine, Tuah Public Shooting Grounds, and Penrose, in Box Elder County.

EYE GNATS (Hippelates spp.)

Georgia. T. Thompson (August 22): Very annoying to workers outdoors in Pierce, Lowndes, Brooks, and Thomas Counties, southern Georgia, throughout August.

AMERICAN DOG TICK (Dermacentor variabilis Say)

Massachusetts. C. N. Smith (July 31): Adults declined rapidly in numbers at Vineyard Haven, on Martha's Vineyard Island, throughout July, so that by the end of the month they were scarce in most areas. The

immature stages remained active and populations on meadow mice built up rapdily.

South Carolina. F. C. Bishopp (August 11): Very few adults found to be active on Bull Island.

Kentucky. M. L. Didlake (August 25): Tick reported at Frankfort.

ROCKY MOUNTAIN SPOTTED FEVER TICK (Dermacentor andersoni Stiles)

Utah. G. F. Knowlton (August 15): Several cases of Rocky Mountain spotted fever and tularemia have been reported from Carbon County, one case resulting in death.

BROWN DOG TICK (Rhipicephalus sanguineus Latr.)

Kentucky. M. L. Didlake (August 25): Two complaints from Lexington and suburbs.

Kansas. K. R. Lundebery (August 10): Specimens submitted from Fort Leavenworth. Ticks found in a house and occur by hundreds under floor boards and in cracks behind doors. (Det. by H. E. Ewing.)

CATTLE

SCREWWORM (Cochliomyia americana C. & P.)

Georgia. T. Thompson (August 22): Farmers report severe infestations in Pierce, Lowndes, Brooks, and Thomas Counties, southern Georgia, in latter half of August.

A. L. Brody (July 31): Numerous infestations of animals at the experimental farm at Valdosta. High incidence in these animals reflects conditions throughout southern Georgia. Exceptionally high numbers of screwworm reported.

E. E. Rogers (August 26): Highest numbers of adults caught in status trap at Valdosta since August 1. Report of infestations on a pig from near Clyattville.

Florida. F. C. Bishopp and A. L. Brody (August 4): Along the western coast, from Carrabelle to Pensacola, and inland at Milton, Chipley, Crestview and Youngstown more cases of screwworm attack on livestock are reported than have occurred since 1935. Cases not numerous except in a few herds that were exceptionally inviting to screwworm attack because of injuries or operations.

A. L. Brody (August 28): Stockmen in Levy County report serious trouble from screwworms, statements regarding percentage of infestation varying greatly--from 4 to 90 percent. The Gulf coast tick reported as an important predisposing cause.

Alabama. J. M. Robinson (August 18): Reported at Selma and Geneva.

Texas. R. Melvin (July 31): Population of screwworm, as indicated by the number of infested animals, was low in the Menard area during the month.

D. C. Parman (July 31): Collections from traps at Uvalde indicate that there was approximately a 10- to 15-fold increase in the total blowfly population during July. Practically all the increase has been in C. macellaria F. Apparently only a slight increase of C. americana during the latter part of the month. An apparent decrease in the numbers of this species was indicated during the month in the area about Del Rio.

STABLEFLY (Stomoxys calcitrans L.)

Florida. F. C. Bishop and A. L. Brody (August 4): Very scarce along the coast of western Florida from Carrabelle to Pensacola. Not more than one or two seen on an animal and few present in barns. A few more observed at inland points, such as Milton, Chipley, and Youngstown. A mild outbreak reported by several farmers as occurring early in July.

A. L. Brody (August 19): Larvae found breeding in windrows composed of sea weeds (Thalassia spp.) and other plants on the shore of the bay within the limits of Panama City.

HORN FLY (Haematobia irritans L.)

Florida. F. C. Bishopp and A. L. Brody (August 4): Very scarce along the coast of western Florida, from Carrabelle to Pensacola. Many herds observed had practically none, and the heaviest infestation seen was about 25 flies per animal. Horse guards (Bombox sp.) are numerous around livestock.

Texas. W. G. Bruce (July 31): Horn flies not troublesome in the vicinity of Dallas during July, but at Cresson infestations in uncontrolled pastures observed in excess of 3,500 flies per head.

LONE STAR TICK (Amblyomma americanum L.)

South Carolina. F. C. Bishopp (August 11): Found present in considerable numbers in all stages in most areas on Bull Island. Seed ticks and nymphs extremely abundant and annoying to people.

GULF COAST TICK (Amblyomma maculatum Koch)

Georgia. E. B. Blakeslee (August 26): Males and females still abundant at Valdosta.

HORSE

HORSEFLIES (Tabanidae)

Florida. F. C. Bishopp and A. L. Brody (August 4): Horseflies, of several species observed as annoying livestock to some extent along the western coast, from Carrabelle to Pensacola, and also inland near the Escambia

River. The largest number seen per animal was about five.

RABBIT

A FLESH FLY (Wohlfahrtia vigil Walk.)

Pennsylvania. L. H. Bennett (August 8): From 3 to 5 percent of nestling cottontail rabbits in Center County infested with larvae.

H O U S E H O L D A N D S T O R E D - P R O D U C T S I N S E C T S

TERMITES (Isoptera)

Pennsylvania. C. C. Zeliff (August 7): Reticulitermes flavipes Kol. found in a window seat in a house in Altoona.

Oklahoma. F. A. Fenton (August 19): Termites found on trees at Dover, Kingfisher County, and on cherry trees at Guthrie, Logan County.

ANTS (Formicidae)

Connecticut. N. Turner (August 22): An unusually large number of cases of Camponotus herculeanus pennsylvanicus Deg. in buildings reported.

Delaware. D. MacCreary (August 14): Specimens of Solenopsis molesta Say sent in were part of a large flight which occurred recently in various parts of the State. Collected at Newark on August 8. (Det. by M. R. Smith.)

Florida. A. N. Tissot (August 24): Small red ants, species undetermined, but possibly Wasmannia auropunctata Roger from nesting habit. Reported as very troublesome in a house and citrus grove at Naples on August 8.

Mississippi. C. Lyle (August 24): Specimens of the Argentine ant (Iridomyrmex humilis Mayr) received from Lowndes County on August 18, where there is a reinfestation in Columbus. Other places have recently complained of them. Specimens of Pharaoh's ant (Monomorium pharaonis L.) received from Clarke County on August 7 and from Sunflower County on August 11. Specimens of S. molesta received from Yazoo County on July 20. The fire ant (S. xyloni McCook) very numerous this summer. Specimens received from Leflore and Yazoo Counties, and reports received from Lee and Washington Counties, as well as from the southeastern section. Specimens of carpenter ants, Camponotus herculeanus pennsylvanicus, received from Adams County, where they were nesting beneath the floor of a house.

Oklahoma. F. A. Fenton (August 19): Black ants found in house at Ponca City, Kay County, and on cherry trees at Hinton, Caddo County; house ants found in house at Roff, Pontotoc County, and in house and lawn at Purcell, McClain County; and ants found in lawn at Norman, Cleveland County.

Arizona. C. D. Lebert (August 18): Specimens of ants, Pogonomyrmex barbatus var. near molefaciens Buckley, sent in from Phoenix on August 8 from house. Winged forms of ants came into a house by the millions, following heavy rains. Swarms continuing for 5 nights. Roof of house completely covered with ants. Other ants of this species taken from a hill near the house.

Texas. R. K. Fletcher (August 12): House ants of undetermined species reported from Brazos, Gray, and Bexas Counties. House ants reported very frequently all summer.

HOUSE CRICKET (Gryllus domesticus L.)

New Jersey. C. W. Collins and C. L. Griswold (August 19): Observed breeding abundantly in an area in Denville Township, Morris County. These insects spread to a nearby store, tavern, and residences in annoying numbers and after fire was started in the dump they migrated in large numbers to nearby buildings.

Maryland. E. N. Cory (August 18): Particularly heavy infestation in houses at Colmar Manor.

GERMAN COCKROACH (Blattella germanica L.)

Minnesota. H. Milliron (August 18): Abundant in houses in Litchfield and Lucan.

AUSTRALIAN COCKROACH (Periplaneta australasiae F.)

Utah. G. F. Knowlton (August 21): Infesting one food storehouse at Farmington.

BROWN-BANDED COCKROACH (Supella supellectilium Serv.)

Florida. A. N. Tissot (August 24): Sent in from Saint Petersburg on August 14. Reported as rather numerous in a house.

CARPET BEETLES (Dermestidae)

Minnesota. H. Milliron (August 18): Attagenus piceus Oliv. moderately abundant on household goods at Saint Paul and Minneapolis.

Nebraska. M. H. Swenk (August 15): Specimen received on July 21 of the black carpet beetle (A. piceus) taken from under a rug. Specimen of varied carpet beetle (Anthrenus verbasci L.), sent in on July 19, found infesting a house in Douglas County.

Utah. G. F. Knowlton (August 14): Anthrenus scrophulariae L. damaging overstuffed furniture in a house at Logan.

CADELLE (Tenebroides mauritanicus L.)

Minnesota. H. Milliron (August 18): Abundant at New Richmond in flour.

Michigan. R. Hutson (August 22): Observed in grain bins at Lansing, Mulliken, and Allegan.

Nebraska. M. H. Swenk (August 15): A granary in Boone County reported infested with the cadelle on August 9.

A BOSTRICID BORER (Dinoderus brevis Horn)

Minnesota. H. Milliron (August 18): Abundant on imported bamboo at Anoka.

POWDER POST BEETLES (Lyctus spp.)

Ohio. G. R. Powers, Jr. (August 22): Specimens sent in of L. parallelopipedus Melsh. and L. planicollis Lec. were discovered in lumber stored in warehouse at Columbus. (Det. by W. S. Fisher.)

CAMEL CRICKETS (Ceuthophilus spp.)

Nebraska. M. H. Swenk (August 15): Have been very abundant for this type of insect during the period July 16 to August 15.

M I S C E L L A N E O U S N O T E S

Washington. M. H. Hatch (August 8): Two specimens of a tenebrionid, Cynaeus angustatus Lec., collected from a flour mill, were sent in for identification. (Det. by E. A. Chapin.)

L. G. Smith (August 16): A number of ephydrid flies (Ephydra subopaca Loew) sent in from Grant County with report that millions of them were present in and on top of the mud on shores of Soap Lake.

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